

*An experience
that has lasted
for over 25
years*

ARW



CATALOG

2022 / 2023



*A range of simple
instruments for a
variety of industries
and applications*

www.arwmisura.com

Digital thermometer

ARW 610 B [For order](#) **220121173**



With this instrument you can measure the temperature of any object, liquid, air or gas with extreme simplicity and easy. Depending on the use, you can choose the most appropriate probe from those illustrated below.

- Provided with an input for connection of "K" type thermocouples with high response speed
- Measurement range $-50 \div +1300^{\circ}\text{C}$ with resolution 0.1°C up to 199.9°C
- Accuracy $\pm 1.5\%$ of reading or $\pm 1^{\circ}\text{C}$
- **Large $3 \frac{1}{2}$ LCD display with backlight**
- $^{\circ}\text{C}$ or $^{\circ}\text{F}$ selection
- MAX-HOLD function for detecting the maximum temperature value
- Provided with the automatic power-off function (after 15 minutes of inactivity)
- Low battery warning
- Dimensions $162 \times 76 \times 38.5$ mm - Weight 210 g
- Supplied complete with vinyl case, protective shell, general purpose wire temperature probe (max 150°C), battery and user manual

EMC
EN: 50081-1, 50082-1

Type "K" thermocouple temperature probes



Contact surface probe max 600°C
Stem Size $\varnothing 15 \times 200$ mm "50mm bend"

[For order](#)
221120955



Penetration probe for liquids and semi-solids
Stem size $\varnothing 5 \times 180$ mm max 800°C

[For order](#)
221120346

Stem size available $\varnothing 5 \times 500$ mm max 1.100°C

[For order](#)
221120546



Probe for liquids and semi-solids max 150°C
Stem size $\varnothing 3 \times 80$ mm

[For order](#)
221120964



Surface contact probe $\varnothing 6 \times 130$ mm max 600°C

[For order](#)
221120519



Steel mesh wire probe for general use $\varnothing 3 \times 1000$ mm max 600°C

[For order](#)
221120098



Probe for high temperature surfaces ideal for measuring the temperature of grills, plates, moulds, castings, etc.

Very fast response time. Maximum temperature 1000°C . $\varnothing 12 \times 130$ mm.

[For order](#)
221120112



Wire probe for general use max 150°C (air - gas)
Wire $\varnothing 1,5 \times 1000$ mm

[For order](#)
221120963



Probe for Air/Gas $\varnothing 6 \times 160$ mm max 250°C

[For order](#)
221120300

Digital thermometer

ARW 612 B [For order](#) **220121174**

Version with double input channel for "K" type thermocouples with the possibility of carrying out readings individually or in differential mode.

- Measurement range $-50 \div +1300^{\circ}\text{C}$ with resolution 0.1°C up to 199.9°C
- Accuracy $\pm 1.5\%$ of reading or $\pm 1^{\circ}\text{C}$
- Supplied complete with a shockproof protective shell
- **Large $3 \frac{1}{2}$ LCD display with backlight**
- $^{\circ}\text{C}$ or $^{\circ}\text{F}$ selection
- MAX-HOLD function for detecting the maximum temperature value
- Provided with the automatic power-off function (after 15 minutes of inactivity)
- Low battery warning
- Dimensions $162 \times 76 \times 38.5$ mm - Weight 210 g
- Supplied complete with vinyl case, **2 general purpose wire temperature probes** (max 150°C), battery and user manual

COMPACT THERMOMETERS



ARW 131 *For order* **220121423**

Pocket digital thermometer

Ideal for measuring the temperatures of liquids and semi-solids. Supplied complete with protective cap.



EASY TO USE!
Remove the protective cap, press the key ON/OFF and put it in the test area!

- Measurement range: from -40 to +150°C
- Resolution: 0.1°C or 0.1°F
- Accuracy: $\pm 1.5\% \pm 2^\circ\text{C} / \pm 3.8^\circ\text{F}$
- Sensor type: Thermistor
- 8mm LCD display
- Battery: 1.5V
- Dimensions: 19 x 32 x 211mm

ARW 810-700 *For order* **220121281**

switchblade digital thermometer



- Measurement range: from -49.9 to +199.9°C
- Resolution: 0.1°C
- °C/°F selection
- Accuracy: $\pm 1^\circ\text{C}$
- Max/min function
- Sensor type: Thermistor
- Probe dimensions: $\varnothing 3.5 \times 80 \text{ mm}$
- Battery: 1.5 v with autonomy 5000 h
- Weight: 25g

4-CHANNEL THERMOMETER WITH SD CARD

ARW-V47 SD *For order* **220122117**

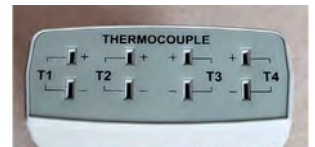


Characteristics:

- Type K/J/T/E/R/S probes
- 4 channels (T1, T2, T3, T4), T1-T2.
- Type K: -100 to 1300 °C
- Type J: -100 to 1200°C
- Pt 100 ohm: -199.9 to 850.0°C
- Circuit managed by microprocessor
- Selectable unit of measure °C or °F

- SD card capacity: 1GB to 16GB
- LCD with light green backlight, easy to read.
- Auto shut-off to save battery life
- Memory function to recall the Max, Min value.
- Instruction manual included

Instrument supplied without probe. For the selection of the "K" type thermocouple probes, see page. 2



TECHNICAL SPECIFICATIONS

Circuit	Managed by microprocessor	
Display	LCD size: 52mm x 38mm light green backlight (ON/OFF)	
Sensor type	J/K/T/E/R/S type thermocouple	
Input channels	T1, T2, T3, T4, T1-T2	
Resolution	0.1°C/1°C, 0.1°F/1°F	
Sampling time data logger	Auto	from 1 second to 3,600 seconds Sampling time can be set to 1 second. Press the data logger button once, it will save the data only once.
Setting range	Manual	Set the sampling time to 0 seconds Manual mode, position 99 can be selected
Memory Card	SD card storage capacity from 1GB to 16GB	
Advanced settings	<ul style="list-style-type: none"> - Clock (Year/Month/Day, Hours/Minutes/Seconds) - Temperature unit in °C or °F - SD card setting decimal point - Sampling time - Automatic shutdown management - SD memory card format - Acoustic signal ON / OFF 	
Temperature Compensation	Automatic for K/J/T/E/R/S type probes	
Linear Compensation	Over the entire range	
Offset Adjustment	Available for K/J/T/E/R/S type probes	
Sensor for sockets	Standard 2-pin type for K/J/T/E/R/S type probes	
Out of range indication	The display signals "----"	
Sampling time	about 1 second	
Data retention	Retention of the displayed value	
Memory recall	Recall of the maximum and minimum values	
Data output	Interfaceable to PC via RS 232/USB	
Out of range indication	the display signals "----"	
Operating Temperature	0°C to 50°C (32°F to 122°F)	
Operating Humidity	Less than 80% R.H.	
Power supply	x 1.5V alkaline battery (UM3, AA) or equivalent. Optional 9V ADC adapter	
Dimensions	177 x 68 x 45 mm (7.0 x 2.7 x 1.9 inch)	
Weight	489 g. (1.08LB)	



OPTIONAL ACCESSORIES

code:	description
221121004	PC interfacing software
221121040	USB cable

ELECTRICAL SPECIFICATIONS (23°C ±5°C)

Sensor type	Resolution	Range	Accuracy
K type	0.1°C	-50.1 to -100.0°C -50.0 to 999.9°C	$\pm(0.4\% + 1^\circ\text{C})$ $\pm(0.4\% + 0.5^\circ\text{C})$
	1°C	1000.0 to 1300°C	$\pm(0.4\% + 1^\circ\text{C})$
	0.1°F	-58.1 to -148.0°F -58.0 to 999.9°F	$\pm(0.4\% + 1.8^\circ\text{F})$ $\pm(0.4\% + 1^\circ\text{F})$
	1°F	1000.0 to 2372°F	$\pm(0.4\% + 2^\circ\text{F})$

Accuracy is specified for the instrument only
Linear correction: stores the thermocouple curve in the intelligent circuit of the CPU

Temperature & humidity logger

ARW Thermadata HTB

For order [295-061](#)

ARW Thermadata HTD

For order [296-061](#)

Interface software with USB cable and magnetic base

For order [293-804](#)

- Switching the display between humidity and temperature
- High and low alarm display
- Logging up to a maximum of 16,000 readings
- Visual indication of exceeding limits

The new ThermaData ambient temperature and humidity logger is an instrument capable of measuring and recording temperature and relative humidity (%RH) in a measurement range from -20 +85 °C and from 0 100 %RH.

This meter is able of simultaneously recording both humidity and temperature values up to a maximum of 16,000 readings (8,000 humidity and 8,000 temperature).

The ThermaData logger can be chosen in two versions, without display (HTB) or with LCD display (HTD), both include humidity and temperature sensors.

Each instrument incorporates a red and a green LED, the flashing green LED indicates that the data logger is active and logging while the flashing red LED indicates that the pre-set alarm limits have been exceeded.

These instruments are suitable for a variety of applications, the most important of which certainly include control and monitoring in the food sector (HACCP) and in the air conditioning sector (HVAC).

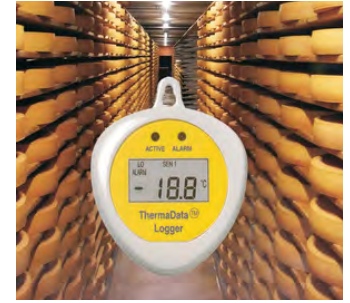
ThermaData logger software

The ThermaData logger is connected to a PC via a USB cable and with a simple click on the relative icon, all stored data can be downloaded and displayed in the form of a table, graph or summary. Through the functions offered by the software, the data can be analyzed and exported in excel , format (.xls) or in text format (.txt).

Notes: for the operation of the data-logger it is necessary to purchase at least one software interface unit.



TECHNICAL SPECIFICATIONS	
Range	-20 to +85°C / 0 to 100 %rh
Resolution	1°C - 0.1 %rh
Accuracy	±0.5°C (0 to +45°C) / ±1°C (-20 to +70°C) / ±1.5°C (+70 to +85°C)
Hysteresis	n/a - ±1 %rh
Sensor	silicon band gap - capacitance polymer
Memory	2 x 8,000 readings
Sampling interval	1 to 255 minutes
Battery	3.6 volt lithium
Battery life	minimum 2 years
Display	10mm LCD - refresh every 6 seconds / 2 LEDs
Dimensions	Ø76x23mm
Weight	80 grams



ARW-835A For order [220122831](#)

Infrared thermometer "IR"

The ARW-835A Optical Pyrometer is the latest born in the ARWMisure house. This instrument is able to measure the temperature remotely with a measurement range from -50°C to +800°C with a resolution of 0.1°C. Thanks to a circular laser pointer, it allows you to precisely locate the measurement area without having to make special calculations of the size of the tested object. The modern design and ergonomic handle make it a practical and easy to use. The important factor is certainly the sensation of sturdiness given by the instrument and the provision of a highly visible display.



- Selectable unit of measure °C - °F
- **Circular laser pointer**
- Automatic locking of the "Data Hold" reading
- Auto power off function
- **New Luminescent Display for optimal vision in any situation**
- "Trigger Lock" continuous measurement function
- **Input for K-type thermocouple probe**
- Optical resolution: Report distance / measuring point ratio D:S 16:1 (Distance/Spot)
- **Wide range of measurements from -50.0 °C to 800 °C**
- Modern design
- IP54 waterproof protection
- Display of Max/Min/DIF/AVG values
- Presettable Hi/Low alarms
- Adjustable emissivity value



TECHNICAL SPECIFICATIONS	
IR temperature range	-50°C ~ 800°C / -58°F ~ 1472°F
IR response time	Less than 150ms
Resolution	0.1°C
IR accuracy	+/-2.0% of reading
Spectral response	8 ~ 14 um
D:S Report	16:1
Emissivity	Adjustable 0.10 ~ 1.0
Temp. range thermocouple	50°C ~ 1370°C / -58°F ~ 2498°F +/-2.5°C (4.5°F) -50 a 0°C (-58 a 32°F)

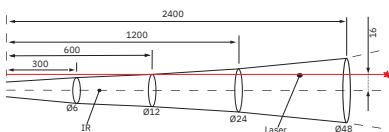
Power supply	9V batteries
Autonomy	About 4 hours of continuous use
K-type accuracy	+/-1.5% +/-1.5°C (2.7°F) 0 to 1370°C (32 to 2498°F) +/-2.5°C (4.5°F) -50 to 0°C (-58 to 32°F)
Charging time	About 2 hours with AC adapter or USB connection
Dimensions	170x50x95mm
Weight	248 g
Supply kits	Battery, K-type wire probe (max 250°C), case and user manual.

ARW - 8859H For order [220121338](#)

Infrared thermometer

This IR thermometer is capable of taking non-contact (infrared) temperature measurements of various objects at the touch of a button. The built-in laser pointer allows you to locate the measuring point precisely, while the backlit LCD display and the push-button panel for selecting the various functions are housed in a practical and comfortable ergonomic handle. It can be used to measure the surface temperature of objects even at a distance and at high temperatures thanks to the extended measurement range up to 1600 °C.

- **D:S measurement report (Distance:Measurement Spot) very focused "50:1". at a distance of one meter we can measure objects with a dimension of 20 mm**
- Built-in single laser pointer



- MAX, MIN, DIF, AVG functions shown directly on the display with backlight function
- Read lock function and set high and low alarms
- Supplied complete with ABS case, support tripod, user manual



TECHNICAL SPECIFICATIONS	
Temperature range	-50°C ~ 1600°C / -58°F ~ 2912°F
R:S (Distance:Spot)	50:1
Display resolution	0.1° Up to 1000°, 1° beyond
Response time	150 ms
Spectral response	8 ~ 14 um
Emissivity	Adjustable from 0.10 to 1.0
Polarity	Automatic
Laser diode	output <1mW, Wavelength 630 - 670 nm, Class 2(11) laser product
Relative humidity	10% - 90%RH operating, <80%RH storage
Diet	9V battery NEDA 1604A or IEC 6LR61 or equivalent
Weight / Size	290 gr (10.2 oz.) / 100 X 56 X 230mm (3.9 X 2.2 X 9.0")
Precision:	-50°-20°C (-58°F-68°F) ±3.0°C (5.4°F)
Temperature from 18°C to 28°C (64°F ~ 82°F)	20°C-500°C (68°F-932°F) ±1.0% ±1.0°C (1.8°F)
	500°C-1000°C (932°F-1832°F) ±1.5%
Humidity < 80% RH	1000°C-1600°C (1832°F-2912°F) ±2.0%

BODY TEMPERATURE THERMOMETER



ARW-8806S For order **220122950**

Non-contact forehead infrared thermometer

The non-contact forehead infrared thermometer is specially designed to measure a person's body temperature, regardless of the ambient temperature.

- Color Purple
- Non-contact measurement
- Selection of unit of measurement °C or °F detection of heat on the forehead
- **Selector for body and surface temperature (body/surface)**
- Acoustic alarm setting function
- Data memory for 32 readings
- Automatic reading block "Data Hold" Auto power off
- Autorange
- Display resolution 0.1°C (0.1°F)
- LCD display backlight



Supplied complete with case and packaging

TECHNICAL SPECIFICATIONS	
Measuring range (In body mode)	32.0°C ÷ 42.5°C/89.6°F ÷ 108.5°F
Measuring range (In surface mode)	0°C ÷ 60°C/32°F ÷ 140°F
Resolution	0.1°C/0.1°F
Basic accuracy	32 ÷ 35.9°C/93.2 ÷ 96.6°F (±0.3°C/±0.5°F)
	36 ÷ 39°C/96.8 ÷ 96.6 to 102.2°F (±0.2°C/±0.4°F)
	39 ÷ 42.5°C/102.2 ÷ 108.5°F (±0.3°C/±0.5°F)
Distance measurement	5-15cm (standard on handle)
Response time	0.5 seconds
Power supply	2x1.5V "AAA" batteries not included

Security Compliance:

- ASTM E1965-1998
- EN 980: graphic symbols to be used in the labeling of medical devices
- EN104: information provided by the manufacturer with medical devices
- EN 60601-1: Medical electrical equipment Part 1: General requirements for safety (IEC: 60601-1: 1998)
- EN 60601-1-2: Medical electrical equipment Part 1-2: General requirements for safety Collateral standard Electromagnetic compatibility Requirements and tests (IEC 60601-1-2: 2001)

THERMAL FLOWMETER TEXT

ARW 635-2 For order **220123105**

Thermoflowmeter 635-2 Kit

The testo 635-2 heat flow meter is an indispensable tool for accurately calculating the value of the thermal transmittance of the opaque vertical walls of a building and for calculating the value on windows. Thanks to the testo 635-2, the change in the thermal transmittance before and after the renovation can be determined with extreme precision, reducing energy costs.



- Easy to use instrument with convenient management, large backlit display with readability values even in places with poor lighting
- Equipped with a **solid case** that protects the measuring instrument from possible shocks
- **Large recording memory** (up to 10,000 values even for long periods of time)
- Equipped with a **plate-type heat flow probe** for measuring heat loss and a **radio probe** for measuring the external temperature
- Automatic U-value calculation (w/m²k)
- Testo Comsoft **Professional PC software** for analysis including graphs and tables

testo 635-2 heat flow meter kit:

- Text tool 635-2
- Heat flow probe (compliant with ISO 9869-1:1994)
- Immersion wire probe 800mm
- FM radio module
- Handle for probe terminals
- ABS case
- One paste
- Power supply via USB (5VDC 500mA)
- testo ComSoft professional software for PC installation (instruction manual included)



TECHNICAL SPECIFICATIONS		
Temperature - NTC	Measuring range	-40 to +1370°C
	Accuracy	±0.2°C (-25 to +500°C) ±0.4°C (-40 to -25.1°C) ±0.4°C (+75 to +99.9°C) ±0.5% of m.v. (remaining field)
	Resolution	0.1°C
Temperature - TC Type K (NiCr-Ni)	Measuring range	-200 to +1370°C
	Accuracy	±0.3°C (-60 to +60°C) ±(0.2 °C + 0.5 % of m.v.) (Remaining range) ±0.5% of m.v. (remaining field)
	Resolution	0.1°C

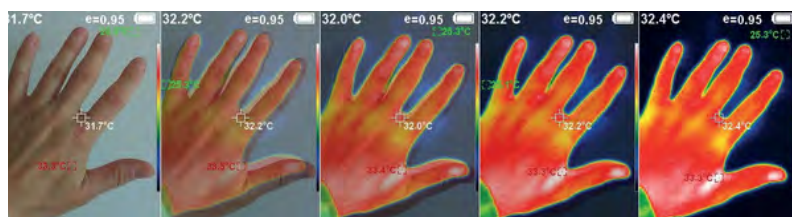
Absolute precision	Measuring range	0 to +100 %RH
	Accuracy	See probe data
General technical information	Resolution	0.1% RH
	Measuring range	0 to 2000 hPa
Absolute precision	Accuracy	See probe data
	Resolution	0.1 hPa
General technical information	Weight	428 g
	Dimensions	220x74x46mm
General technical information	Operating temperature	-20 to +50°C
	Battery Type	ABS / TPE / metal Alkaline-manganese, mignon, type AA
General technical information	Downtime	200 hours
	Storage temperature	-30 to +70°C

ARW 322 For order **22123114**

Thermal imaging camera "Infrared Camera"

The infrared camera ARW-322 is a compact and handy digital camera, designed for non-contact temperature detection and professional thermal imaging. Thanks to a large color LCD screen, it allows you to clearly view the various problems and defects. To increase the temperature differentiation, the ARW-322 thermal imaging camera is equipped with a visible light camera for fusion (visible/Infrared). Thermal images are stored in the instrument and can be read by connecting with a USB cable (supplied) and PC for viewing or printing.

- Large high definition display
- **The emissivity index** can be adjusted to increase the accuracy when measuring the temperature on a reflective surface
- A cursor allows you to **instantly identify the highest and lowest temperature** within the measurement area by displaying it on the thermal image
- Selectable color palette (Rainbow, red iron oxide, cool colors, black and white)
- Equipped with a **visible light camera to display the real image (with the possibility of managing different overlapping levels with thermographic image)**



Applications:

- Control of electronic equipment, transmission lines and transformers
- Search for hidden heat sources and thermal dispersion
- Search and rescue personnel at the scene of the fire
- Analysis of heat losses in heating systems and installations
- Control of machinery and machines in the field of preventive maintenance. Locating the point of failure
- Indispensable instrument in the electrotechnical and electronic sector for the control and monitoring of systems, switchboards and electronic equipment (components and boards)
- Night monitoring in security departments

Other fields of application:

- Localization of building pathologies and construction quality assurance (in particular: humidity of windows and doors)
- Simple verification of heating systems and installations
- Secure location of broken pipelines

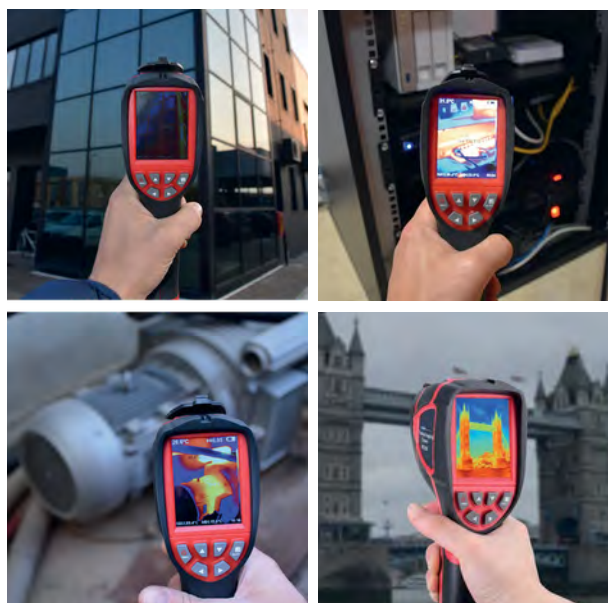


USB cable connection with thermal imager

packaging

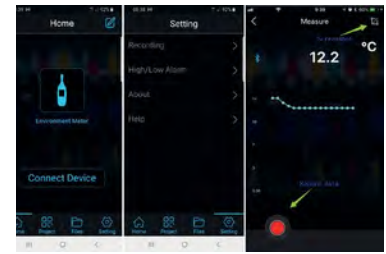
TECHNICAL SPECIFICATIONS

Display screen	2.8" full angle TFT screen
Infrared image resolution	220x160
Field angle	35°x26°
Temperature measurement range	da -20 °C a 450 °C (da -4°F a 842 °F)
Visible image resolution	300.000 pixel
LCD resolution	320x240
Shortest focusing distance	0.5 m
Thermal sensitivity	70 mk
Emissivity	Adjustable from 0.01 to 1.00
Frame rate of thermal images	9Hz
Wavelength coverage	8-14 μm
Focus mode	Fixed
Color palette	Rainbow, red iron oxide, cool colors, black and white, black and white
Memory	Integrated 3G (over 20 thousand images stored)
File format	JPG
USB	Micro USB 2.0
Power supply	Built-in rechargeable 18650 battery
Usage time	2-3 hours
Automatic power-off time	Selectable: 5 minutes / 20 minutes / non-automatic
Setting command	Unit, language, date, time, info
Language	English / Chinese / Italian / German
Operating temperature	0° ~ 45°C
Storage temperature	-20C ~ 60C
Relative humidity	< 85% RH



The new series of compact instruments for environmental analysis "The right solution at a low cost"

The ARW-90-92-95-96 series of instruments offers a valid solution for measuring parameters such as brightness, air speed, noise and concentration of fine dust "Particulate". The robust, modern and small-sized structure has been designed for professional use and is particularly suitable for frequent and fast use. The ARW-90/92/95 versions are equipped with a Bluetooth interface for a simple and fast data transfer to a Smartphone or Tablet able to satisfy the needs of measurement and data analysis.

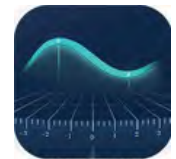


Compact Anemometer

ARW-90 For order **220122687**



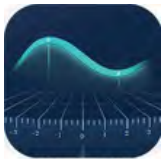
TECHNICAL SPECIFICATIONS				
	Range	Resolution	Accuracy	
Air speed	m/s	1.10 - 25.00 m/s	0.01 m/s	± (3,5% + 0.20 m/s)
	km/h	1.4 - 54.0 km/h	0.1 km/h	± (3,5% + 0.8 km/hr)
	ft/min	80 - 2980 ft/min	1 ft/min	± (3,5% + 40 ft/m)
	mph	0.9 - 33.0 mph	0.1 mph	± (3,5% + 0.4 mph)
	knots	1.10 - 25.00 knots	0.01 knots	± (3,5% + 0.20 knots)
Temperatures	-10 - 60°C (14 - 140°F)		0.1°C/F	2.0°C (4.0°F)
Display	Backlit on double line, 4 digit LCD			
Functions	Min. values and max and Hold for reading block			
Sampling time	2 readings per second (approx.)			
Automatic power-off time	After 10 min. of inactivity			
Operating conditions	0 - 50°C (32 - 122°F) < 80% RH / max altitude 2000 m (7000 ft)			
Power supply	9V battery (low battery indication)			
Dimensions	213mm x 54mm x 36mm			



Meterbox Pro
Free "Application" available for download

Compact Sound level meter

ARW-95 For order **220122689**



Meterbox Pro
Free "Application" available for download

TECHNICAL SPECIFICATIONS	
Measurement range	35 ~ 130 dB
Resolution	0.1 dB
Accuracy	± (3.0dB (ref 94dB @1kHz)
Frequency	31.5 ~ 8kHz
Frequency weighting	A, C
Display	Double line backlit, 4 digit LCD
Functions	Min. values and max and Hold for reading block
Microphone	½" electric condenser
Automatic power-off time	After 10 min. of inactivity
Operating conditions	0 - 50°C (32 - 122°F) < 80% RH / max altitude 2000 mt (7000 ft)
Power supply	9V battery (low battery indication)
Dimensions	213mm x 54mm x 36mm

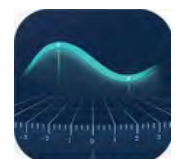


Compact Luxmeter

ARW-92 For order **220122688**



TECHNICAL SPECIFICATIONS			
Functions	Range	Resolution	Precision
Brightness	40,000Lux /Fc	0.1Lux/0.01Fc	±5% ±10d (<10,000Lux)
Sampling time	1.5 times per second (approx.)		
Display	Backlit, 4 digit LCD with bar graph display		
Functions	Min. values and max. and Hold to block reading		
Automatic power-off time	After 10min. of inactivity		
Operating Conditions	0 - 50°C (32 - 122°F) <80% RH max altitude 2000m (7000ft)		
Power supply	9V battery (low battery indication)		
Dimensions	213mmx54mmx36mm		



Meterbox Pro
Free "Application" available for download

FINE DUST METER "Particle Counter"



ARW-96B For order **220122690**

Particle counter ARW-96B with backlit 2.0" TFT LCD color display for fast, easy and accurate readings of fine dust concentration in two measurement levels (PM2.5/PM10). The instrument also has the detection of ambient temperature and humidity. The ideal solution for carrying out an air quality control in any environment.

FINE DUST METER "PARTICLE COUNTER"		
Particle counter		
Measurement channels	2.5, 10µm (PM2.5/PM10)	
Concentration level	PM2.5: 0~500ug/m ³ PM10: 0~500ug/m ³	
Measurement method	The determination of the concentration of particles suspended in the air by the weight method (PM2.5 / PM10)	
Resolution	1ug/m ³	
Air temperatures and humidity		
	Range	Resolution
Temperature	0 to 50 °C/32 to 122 °F	±1 °C/2 °F
Relative Humidity	0 to 100%RH	±5%RH @0 to 20%RH and 80 to 100%RH ±3.5%RH @20 to 80%RH
Data memory	5000 data	
Display	Backlit graphic LCD, 2.0" TFT 220*176 pixels	
Functions	Date and time shown on the display	
Operating conditions	0 - 50°C (32 - 122°F) <80% RH max altitude 2000m (7000ft)	
Power supply	3.7V rechargeable Li Battery	
Dimensions	185mm x 55mm x 38mm	
Weight	139g	



Bluetooth interface for simple and fast data transfer to Smartphone or Tablet
(Free downloadable "Application" available)

MONOGAS DETECTION DEVICE

ARW 6000 For order **220121485**

The single gas meter ensures reliable detection of the ambient air and rapid alarms for harmful concentrations of carbon monoxide (CO), hydrogen sulphide (H₂S), oxygen (O₂) and sulfur dioxide (SO₂) in based on the version used. This detector can be used for 2 years without requiring any maintenance.



ARW 6000 O₂ For order **220121485**

ARW 6000 CO For order **220121468**

ARW 6000 H₂S For order **220121486**

ARW 6000 SO₂ For order **220121847**

- **Small and robust (IP68):** The small and robust instrument is completely covered by a rubber housing. The size and weight of the ARW 6000 is perfect for personal monitoring. An alligator clip allows the unit to be securely attached to the user.
- **Easy Operation:** The two-button operation is intuitive and can be locked to prevent misuse.
- **New sensor technology and low service costs:** All versions are equipped with a powerful battery and extremely durable sensors that react quickly due to fast electrochemical reaction times and a very short propagation path. Neither the sensor nor the battery require replacement during their entire service life. This period of life quantified in 2 years begins with the first activation of the instrument which triggers a countdown which ends with the final switching off of the instrument. A warning signal will appear before the life of the instrument expires.
- **Alarm and warning functions:** The instrument is equipped with a vibrating alarm, an audible alarm and an optical alarm. For optimal perception of the alarm, a two-tone signal is used. Equipped with a function for recording events together with the relative date and time.

Article	Range	Resolution	Alarm thresholds	Response time
Arw 6000 CO	0 – 2000 ppm	1 ppm	30 / 60 ppm	15 sec.
Arw 6000 H ₂ S	0 – 100 ppm	0.1 ppm	5 / 10 ppm	15 sec.
Arw 6000 O ₂	0 – 25 Vol.-%	0.1 Vol.-%	19 / 23 % vol.	10 sec.
Arw 6000 SO ₂	0 – 100 ppm	0.1 ppm	0,5 / 1,0 ppm	15 sec.

TECHNICAL SPECIFICATIONS	
Dimensions	64 x 84 x 20 mm
Weight	106g (113g. with clip)
Environmental conditions	Temperature: -30 to +55°C Pressure: 700 to 1,300 hPa Humidity: from 10 to 90% r.h.
Degree of protection	IP 68
Display	Language-free LC display, indication of gas type to be measured, current concentration during alarm, operating time, alarm and warning functions

Operating time	2 years from the first activation (normally at 25°C)
Conditions of Use	Atmospheric pressure 700 - 1300 hPa Air humidity 10 – 90 % relative humidity, non-condensing Temperature -30°C to +55°C (briefly down to -40 °C for 1 h, depending on the sensor)
Acoustic alarm	Two-tone alarm, normally > 90 dB (A), at a distance of 30 cm
Certifications	CE Marking (89/336/EEC, 94/9/EC) cCSAus, IECEx, ATEX, CE

ANEMOMETERS



ARW-907 For order **220123112**

Digital Air Flow Thermo-anemometer

Portable digital anemometer used for measuring air flows with simultaneous detection of speed, temperature and humidity parameters with calculation of the volumetric flow rate. Instrument equipped with numerous functions, such as the measurement of the maximum/minimum and average values of the air flows, blocking of data reading via the HOLD key and large display for visibility of multiple values at the same time. It is ideal for monitoring air conditioning and conditioning systems (HVAC) in various environments such as factories, companies, public buildings, offices, homes, etc...



- Equipped with a six-blade wind wheel with an **extendable telescopic rod** (540mm fully extended)
- **Large backlit display** with simultaneous visibility of speed and temperature values
- Measurement of minimum, maximum and average values
- HOLD function for reading block
- **Large memory** with recording up to 960 data (Single value or automatic saving mode with sampling interval setting from 0 data 9999 sec)
- Auto power off function
- Low battery warning
- **Selectable units of measure**, m/s, km/h
- Fan direction display from 0 to 360° with **N/E/S/O cardinal points indication**
- Equipped with **USB data interface with PC software**

TECHNICAL SPECIFICATIONS	
Operating Temperature	0 ~ 50°C (32-122°F)
Storage Temperature	-40 ~ 60°C (-40 ~ 140°F)
Operating Humidity	40 ~ 80%RH
Storage humidity	≤80%RH
Power supply	AAA 1.5V alkaline battery *4
Instrument dimensions:	Instrument: 73x38x194mm Vane probe: 74x35x540mm (fully stretched out)
Weight	Instrument weight: 212.9 g (without battery) Probe: 180g

MEASUREMENT PARAMETERS			
Unit of measure	Measuring range	Resolution	Accuracy
m/s (meters to second)	0.3 - 45.0 m/s	0.01 m/s	±3%± 0.1
ft/min (feet to minute)	60-8800 ft/min	0.01.01.1 ft/min	±3%± 20
knots (nautical knots MPH)	0.6-88.0 knots	0.01 knots	±3%± 0.2
km/h (Kilometers/hour)	1-140.0 km/h	0.01 km/h	±3%± 0.4
mph (mesh per hour)	0.7 - 100 mph	0.01 mph	±3%± 0.2
Range	Measurement Range	Resolution	Area
CFM (cubic ft/min)	0-999900 ft3/min	0.001-100	0.001 to 9999ft2
CMM (cubic meters/min)	0-999900 m3/min	0.001-100	0.001 to 9999m2
Temperature	Measuring range	Resolution	Accuracy
C°	0-45 °C	0.1	±1.0 °C
F°	32-113F	0.18	±1.8 °F
Humidity	MIN/MAX	Resolution	Accuracy
%RH	10-90	0.1	±5%

ARW-911 For order **220123111**

Hot wire Thermo-anemometer

The hot wire anemometer is a professional instrument for measuring wind speed, temperature and flow rate of an air flow. It is designed for measuring wind speed in various environments, particularly suitable for measurements inside ducts and pipes thanks to the reduced size of the sensor and the telescopic probe which allows it to reach different points inside the duct. Equipped with various functions including a data memory (960 readings) and a software interface for PC connection. This type of anemometer is applied in the measurement of the speed and flow rate of air flows inside factories, schools, offices, homes, in the control and testing of air conditioning, suction and air conditioning systems (HVAC).

- The **telescopic probe** with a size of 74x35x1000mm (Length 1mt. fully extended with jointed part at the head) becomes an important advantage in measuring ducts, grates and diffusers that are not always easy to reach
- **Calculation function** of the minimum, maximum and average values of the speed of the air flows
- **Internal data memory** 960 values (Single value or automatic saving mode with sampling interval setting from 0 to 9999 sec)
- The ARW-911 hot wire anemometer is supplied complete with data interface with **supply of software and USB cable**
- Multifunction with direct reading in various selectable speed measurement scales: m/s; meters to second I km/h, kilometers to hour lft/min, feet to minute IMPH - miles to hour
- **Volumetric flow calculation function** (CMM= m3/min CFM. CFM = ft3/min)
- Low battery indication
- Data hold function (HOLD)
- Powered by rechargeable lithium ion batteries
- Auto power off function

TECHNICAL SPECIFICATIONS	
Operating Temperature	0 ~ 50°C (32-122°F)
Storage Temperature	-40 ~ 60°C (-40 ~ 140°F)
Operating Humidity	40 ~ 80%RH
Storage humidity	≤80%RH
Power supply	AAA 1.5V alkaline battery *4
Instrument dimensions:	Instrument: 73x38x194mm Vane probe: 74x35x540mm (fully stretched out)
Weight	Instrument weight: 212.9 g (without battery) Probe: 180g

MEASUREMENT PARAMETERS			
Unit of measure	Measuring range	Resolution	Accuracy
m/s (meters to second)	0.3 - 30.0 m/s	0.01 m/s	±3%± 0.1
ft/min (feet to minute)	60-5904 ft/min	0.01.01.1 ft/min	±3%± 20
knots (nautical knots MPH)	0.6-58.3.0 knots	0.01 knots	±3%± 0.2
km/h (Kilometers/hour)	1-108.0 km/h	0.01 km/h	±3%± 0.4
mph (mesh per hour)	0.7-67 mph	0.01 mph	±3%± 0.2
Range	Measurement Range	Resolution	Area
CFM (cubic ft/min)	0-999900 ft3/min	0.001-100	0.001 to 9999ft2
CMM (cubic meters/min)	0-999900 m3/min	0.001-100	0.001 to 9999m2
Temperature	Measuring range	Resolution	Accuracy
C°	0-45 °C	0.1	±1.0 °C
F°	32-113F	0.18	±1.8 °F
Humidity	MIN/MAX	Resolution	Accuracy
%RH	10-90	0.1	±5%



HOT WIRE THERMO-ANEMOMETER



ARW 8880

For order **220121900**

Thermo-anemometer

The ARW 8880 hot wire thermo-anemometer is able to measure the speed and temperature of the air flows. The large backlit display offers easy reading with the simultaneous indication, on two lines, of the speed and temperature values as well as providing various indications. Thanks to the small telescopic probe, it is easy to use for measurements inside ducts. Supplied complete with extendable telescopic probe (from 300mm fully closed to max. 1100mm fully extended), data management software and usb cable. All inside a sturdy ABS carrying case.

- Hot wire microprocessor circuit for measuring air speed.
- Particularly suitable for readings at low speeds with high precision.
- Large backlit LCD display
- Recording of Max./min. values. with the possibility of recall, HOLD key to block the reading
- Calculation of the average value on multiple readings
- Auto shut-off after about 20 min. of inactivity
- Fields of application: Plant engineering, conditioning, air conditioning and heating sector, measurement of extractor hoods, spray booths, microclimate comfort in public or private environments.
- Particularly suitable for use indoors of the ducts thanks to the small size of the probe.



EMC
EN: 61326



Supplied complete with USB connection cable and data management software



TECHNICAL SPECIFICATIONS

Operating Temperature	32 - 122°F (0 - +50°C)		
Storage Temperature	14 - 140°F (-10 - +60°C)		
Operating humidity	<80% RH		
Operating altitude	max. 2000 meters (7000ft)		
Battery	1x 9 volt (NEDA 1604)		
Power supply	9V battery		
Dimensions	Instrument: 200 x 75 x 48mm Telescopic probe: from 300mm to max 1100 fully open		
Weight	306g		
Speed	Range: 0.2 - 25.0 m/s	Resolution: 0.01m/s	Accuracy: ± (3% + 0.20m/s)
	Range: 0.7 - 90.0 km/h	Resolution: 0.1km/h	Accuracy: ± (3% + 0.8km/hr)
	Range: 40 - 3940 ft/min	Resolution: 1 ft/min	Accuracy: ± (3% + 40ft/m)
	Range: 0.4 - 45.0 mph	Resolution: 0.1mph	Accuracy: ±(3%+0.4MPH)
Temperature	Range: 0.4 to 38.8 knots	Resolution: 0.1 knots	Accuracy: ± (3% + 0.4 knots)
	Range: 0°C - 50°C (32 - 122°F)	Resolution: 0.1°C / 0.1°F	Accuracy: ± 1°C / 1°F

VANE THERMO-ANEMOMETERS



ARW 8893 For order **220121597**

Thermo-anemometer

The ARW 8893 thermo-anemometer is able to measure air velocity, flow rate (volume) and temperature. The large backlit display offers easy reading with the simultaneous indication, on two lines, of the speed and temperature values as well as providing various indications.

- Custom LSI microprocessor circuit
- Displays: Dual 0.7" (16 mm) 4-digit LCDs
- Sampling: 1 reading per second (approx.).
- Sensor: Speed/Flow: With ball bearing low friction angled impeller.
Temperature: NTC-type precision thermistor
- Auto power-off after about 20 min. of inactivity
- Operating temperature: 32 - 122°F (0 - +50°C)
- Storage temperature: 14 - 140°F (-10 - +60°C)
- Operating Humidity: <80% RH
- Operating altitude: max. 2000 meters (7000ft)
- Battery: 1x 9 volt (NEDA 1604)
- Battery life: approx. 80 hours. (if the backlight is used frequently, the life may decrease)
- Power supply: 8.3 mA DC approx.
- Dimensions: Instrument: 203 x 75 x 50mm
/ Wind wheel Sensor: 2.75" (70mm) Diameter



MEASUREMENT PARAMETERS			
Speed	Measuring range	Resolution	Accuracy
m/s (meters per second)	0.40 - 30.00 m/s	0.01 m/s	± (3% + 0.20 m/s)
km/h (kilometres/hour)	1.4 - 108.0 km/h	0.1 km/h	± (3% + 0.8 km/hr)
ft/min (feet per minute)	80 - 5900 ft/min	1 ft/min	± (3% + 40 ft/m)
mph (miles per hour)	0.9 - 67.0 mph	0.1 mph	± (3% + 0.4 MPH)
knots (nautical knots MPH)	0.8 to 58.0 knots	0.1 knots	± (3% + 0.4 knots)
Range	Measurement Range	Resolution	Area
CMM (cubic meters/min)	0-999900 m3/min	0.001 to 100	0.000 to 999.9m2
CFM (ft cubi/min)	0-999900 ft3/min	0.001 to 100	0.000 to 999.9ft2
Measuring range		Resolution	Area
Temperature		-10C° - 60C° (14 - 140 °F)	0.1 °F/C 4.0 °F (2.0 °C)

EMC
EN: 50081-1, 50082-1
EN: 60825-1

ARW 618 For order **220121279**

Thermo-Anemometer with separate wind wheel for measuring air flows in various fields of use. The instrument is equipped with a large backlit display with double reading, a protective shell and a shockproof case.

- High sensitivity and accuracy
- Simple to use design
- Large display
- **Type K sensor for temperature measurement**
- Low energy consumption
- MAX-HOLD and DATA-HOLD function
- Low battery warning

MEASUREMENT PARAMETERS				
Unit of measure	Scope	Resolution	Theshold	Accuracy
m/s	0.0-45.0	0.1	0.3	± 3%
Knots	0.0-88.0	0.1	0.6	± 3%
Km/hr	0.0-140.0	0.1	1.0	± 3%
Temp.-°C	0-60.0	0.1		± 0.8
Temp.-°F	32.0-140.0	0.1		± 1.5



EMC
EN: 50081-1, 50082-1
EN: 60825-1

MICROMANOMETER ANEMOMETER



ARW-8920 [For order](#) **220122118**

Pitot tube Anemometer Micromanometer

The ARW-8920 micromanometer/anemometer allows simultaneous measurement of both pressure and flow rate in a duct. Easy to handle and equipped with a large backlit LCD display for fast and precise reading. Used to monitor HVAC (Heating, Ventilation and Air Conditioning) systems to ensure good quality indoor air distribution, ensuring proper airflow balance for a comfortable environment. Particularly suitable in cases where there are particular measurement conditions, such as, for example, high temperatures, high speeds, suction ducts with transport of dust or material residues, etc.



- Large LCD display with backlight
- Date-Time and MAX MIN and Average AVG functions
- Reading of the pressure, speed and flow rate of an air flow
- Zero adjustment before each measurement
- Simple setting for calculating the area of a rectangular or circular duct
- **USB interface and software for real-time data analysis with the instrument connected directly to the PC (included in the supply)**
- Low battery indication and sleep mode function
- **Possibility of measuring air flows with high temperatures, up to 600°C** (On the condition of carrying out measurements quickly in order to avoid overheating the pitot tube and the tubes connected to the instrument)

Delivery kits:

Battery 9V battery, USB cable, software, Pitot tube \varnothing 8 x300mm, ABS case and user manual.

MICROMANOMETER	
Accuracy	$\pm 0.3\%$ FSO (25°C)
Repeatability	$\pm 0.2\%$ (Max. $\pm 0.5\%$ FSO)
Linearity/Hysteresis	$\pm 0.29\%$ FSO
Pressure range	± 5000 Pa
Max pressure	10psi
Response Time	0.5 Seconds Typical
Out of scale indication	OL
Subscale indication	-OL

Unit of measure	Range	Resolution
PSI	0.7252	0.0001
mbar	50.00	0.01
inH2O	20.07	0.01
mmH2O	509.8	0.1
Pa	5000	1

PITOT TUBE ANEMOMETER (AIR SPEED)			
	Range	Resolution	Accuracy
m/s (meters/second)	1-80.00	0,01	$\pm 2.5\%$ of reading (at 10.00m/s)
ft/min (feet per minute)	200-15733	1	Accuracy may vary depending on the size of the duct
km/h (kilometers per hour)	3.5-288.0	0.1	
MPH (miles per hour)	2.25-178.66	0.01	
Knots (nautical miles per hour)	2.0-154.6	0.1	

PITOT TUBE ANEMOMETER (RANGE)		
	Range	Resolution
CFM	0-99.999ft ³ /min	0.0001 a 100
CMM	0-99.999m ³ /min	0.001 a 100

TEMPERATURES (INTERNAL INSTRUMENT SENSOR)			
	Range	Resolution	Accuracy
C°	0 a 50.0°C	0.1	$\pm 1.0^\circ$ C
F°	32.0 a 122.0°F	0.1	$\pm 2.0^\circ$ F

THERMO-HYGROMETER

ARW 8892 [For order](#) **220121596**

Digital Thermohygrometer

This instrument is able of measuring air temperature, relative humidity, "dew point" and wet bulb air temperature. Incorporates a number of useful features including, auto power off, min./max. reading and Hold function for reading lock.

- Small size
- Fast response time
- High accuracy
- Data-Hold and Max-Hold function
- Dual backlit displays
- Calculation of dew point
- Wet-Bulb function (Wet bulb temperature)



TECHNICAL SPECIFICATIONS	
Display	Dual LCDs
Response time	<15 seconds (90% of final air movement value)
Sensor: Humidity	High precision capacitive sensor / Temperature: Thermistor
Absolute humidity	0 - 500g/m ³ , 0 - 218.5gr/ft ³ (calculated from the ratio between RH value and air temp.)
Operating conditions	32 ÷ 122 °F (0 ÷ 50 °C); < 80% RH non-condensing
Power supply	9 Volts
Battery life	Approx. 48 hours
Dimensions / Weight	300x75x50(mm) / 400g
Humidity measurement range	0~100%RH, Accuracy $\pm 2\%$ RH
Temperature measurement range	20~60°C, --4~140°F, accuracy $\pm 1^\circ$ C / 1.8°F
Dew point temperature	30~100°C, -22~199°F, accuracy $\pm 0.5^\circ$ C / 0.9°F
Wet bulb temperature (Wet Bulb)	0~80°C, 32~176°F, Accuracy $\pm 0.5^\circ$ C 0.9°



SOUND LEVEL METERS



ARW 8850 For order **220121180**

Sound level meter "Phonometer"

Instantaneous sound level meter "SPL", ideal for checking and monitoring the noise pollution of plants, machines, engines, moving parts, transmission parts, industrial and civil environments and any source of noise that needs to be controlled. Equipped with a "CAL" function that allows calibration with the use of an internal oscillator that simulates 94 dB at 1KHz.



- Complies with IEC 651 type 2 standards
- Instantaneous measurement range LOW 35 ÷ 100 dB - HI 65÷130 dB
- Resolution 0.1dB
- Accuracy +/- 1.5dB
- MAX-HOLD function for detecting the maximum noise level
- Selectable slow-fast integration time (fast - slow)
- A and C frequency weighting
- Low battery indicator
- Dimensions 251x63.8x40 mm
- Weight 250 g
- Supplied complete with vinyl case, windshield, battery and user manual



EMC
EN: 50081-1, 50082-1

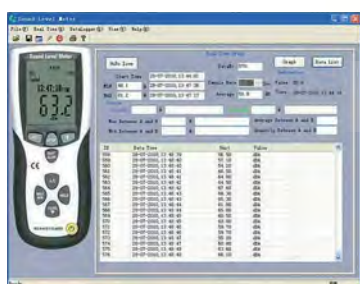
ARW 8852 For order **220121479**

Sound level meter "datalogger"

Instant sound level meter "SPL" with data logger function. This feature allows you to make recordings with the choice of the time interval indicated directly on the display and with the relative transfer to a PC using the USB cable and the supplied software.

The large LCD display allows the simultaneous display of all the information so as to facilitate reading by the operator and simplify its use.

- Complies with IEC61672-1 class 2 standards
- Data logging function (data logger) with storage of min. values. and max.
- Out of range indication
- Selectable A and C weightings
- Selectable Fast/Slow weighting
- AC/DC analog output: AC=1Vrms, DC=10mV dB
- Pre-settable alarm thresholds
- Resolution 0.1dB
- Frequency range: 31.5Hz ÷ 8kHz
- Accuracy +/-1.5dB
- Measurement dynamics: 50dB
- Selectable scale fields: LO 30dB÷80dB, MED 50dB÷100dB, HI 800dB÷130dB, AUTO 30dB÷130db.
- Microphone: 1/2 inch electric condenser
- Dimensions: 278mmx76mmx50mm
- Weight: 350gr.
- Supplied accessories: adjustment screwdriver, wind screen, software CD, USB cable, DC9V external power supply, case and user manual



software



30-130 dB



PC interface



110V/220V AC adaptor



DATA LOGGER



Backlight



EMC
EN: 50081-1, 50082-1



SOUND LEVEL METERS TYPE 1



ARW-1308 For order **220122778**

Phonometer, Instantaneous, Integrator and Analyzer in Frequency class 1

Suitable for noise pollution checks in workplaces "D.L. 81/2008, UNI 9432/2008 and European Directive 2003/10/CE."

The new ARW-1308 sound level meter represents the optimal and extremely competitive solution for measuring acoustic impact in both industrial and environmental fields. It incorporates a single chip Dual-core (DSP + ARM) Microprocessor with FPU to guarantee high calculation speed, precision and stability. This instrument is able to measure the Instantaneous (SPL), Integrated (LEQ) acoustic pressure and to carry out the frequency analysis in Octave band (1/1) and 1/3 of octave (Optional). All measurement parameters can be saved and transferred to the PC for processing thanks to the supplied software.

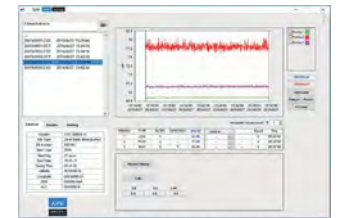


- Complies with IEC61672-1: 2013, ANSI S1.4-1983 and ANSI S1.43-1997
- Optimized 1/1-octave and 1/3-octave bands according to IEC61260-1:2014 and ANSI S1.11-2004
- Measurement Range, Linearity Range: 22dBA ~ 136dBA
- Single Interval measurement dynamics to cover a 123dB range
- Frequency weighting: A / B / C / Z.
- Time Weightings: fast "Fast" / slow "Slow" / Impulsive "Impulse"
- Analysis filters 1/3 of octave 10Hz to 20kHz (optional), suitable for some measurements of environmental acoustic impact (DL447)
- 3 Profiles and 14 defined measurement parameters are calculated in parallel with the different selected frequency weighting
- Acoustic Parameters: Calculate SPL, LEQ, Max, Min, Peak, SD, SEL
- The display of LN statistics and time history (10 percentile levels)
- Measurement time settable by the user from 1 sec. up to a maximum of 24 hours
- TRACK function with graphical representation of a measurement
- Trigger Mode: analogue signal for switching on or off the device with 3.5 mm connector
- Equipped with rear stand mount, thread, 1/4"
- High speed ARM-Core microprocessor with FPU (Float Point Unit) to obtain a wide frequency response, wide dynamic range and low noise
- Internal memory 4G MicroSD (TF card)
- RS-23 remote control



OPTIONAL ACCESSORIES	
Code:	Description
221120372	Acoustic calibrator cl 1 (94dB/114dB, 1KHz) ACCREDIA certificate
221121722	1/3 Octave Analysis Filters 10Hz to 20kHz

SOFTWARE



SWN files record time history data of 3 profiles in Level Meter mode

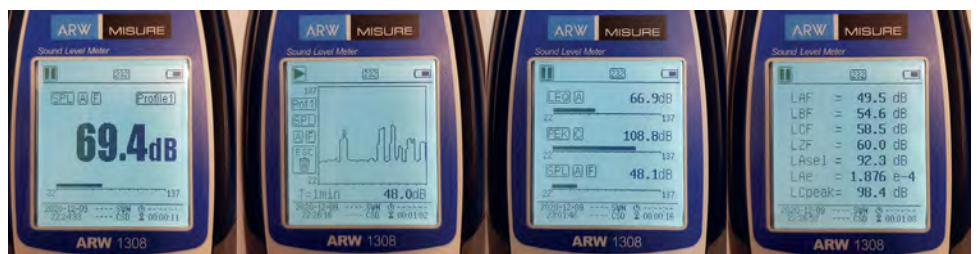
***Discount differentiated for resellers, contact the sales office. VAT excluded**



OTC files record time history data 1/1 Octave or 1/3 Octave (optional) in OCTAVE mode

CSD files save 14 acoustic parameters at any one time, with graphical representation of the selected parameter

DISPLAY



APPLICATIONS



TECHNICAL SPECIFICATIONS

Reference standard	GB/T 3785.1-2010, IEC 60651:1979, IEC 60804:2000 IEC 61672-1:2013, ANSI S1.4-1983, ANSI S1.43-1997
Spectral analysis (Octave band)	average frequencies of a 1/1-octave filter: 31.5 Hz to 16 kHz GB/T 3241-2010, IEC 61260-1:2014 ANSI S1.11-2004
Microphone	MPA231T: prepolarized measuring microphone 1/2", class 1: sensitivity: 50 mV/Pa frequency range: 10 Hz to 20 kHz
Microphone socket	TNC connector with ICCP power supply (4mA)
Integration time	integration time defined by the user in the range from 1 sec. at 24 hours. repetition time: infinite or from 1 to 9999
Protocol cycle	0.1 sec., 0.2 sec., 0.5 sec., from 1 sec. at 24 hours
Statistical acoustic parameters (percentile levels)	LXY(SPL), LXeq, LXYS, LXSEL, LXE, LXymax, LXymin, LXPeak, LXN. Where: "X" indicates the frequency correction: A, B, C, Z "Y" indicates the time constant; F, S, I and "N" indicates the statistical measurement: L1 to L99 from 1 to 99; 3 profiles and 14 user-defined measurements calculated in parallel with different frequency/time constant correction
Frequency weighting	parallel A, B, C, Z
Time constant	Fast, Slow, Impulse and Peak
Linearity field	22dB(A) to 136dB(A)
Dynamic field	123dB (11dB(A) to 134dB(A))
Peak-C field	45 dB(A) to 137 dB(A)
Electric input	The measurement meets the requirements of GB/T3785 and IEC 61672 maximum input voltage 5 Veff (7.07 V peak) preamplifier input impedance > 6 GΩ
Field setting	1 field covering the entire dynamic range
Resolution	24 bits
Sampling frequency	48 kHz(Sampling interval for LN: 20ms)
Time Profile	Screen with visualization of noise characteristic as a function of time. (three selectable profiles: measurement duration: 1 minute, 2 minutes, 10 minutes)
Display	160 × 160 backlit LCD with white light 14 levels of contrast, display update every 1 sec.
Mass memory	4 GB capacity microSD (TF) card
Final report	Through the VA-SLM Software program it is possible to read and analyze the data with the generation of reports based on the saved data
Data export	Direct connection to a PC in order to read the contents of the memory card (as a USB drive)
Output	AC voltage output (5 VEFF maximum, ±15 mA), DC voltage output (10 mV/dB, 15 mA maximum), RS-232 serial interface and USB slot (USB drive mode or modem mode)
Alarm	Index alarm threshold LED for user-defined alarm status display
Power supply	4 1.5 V alkaline batteries (LR6/AA/AM3), are sufficient for about 10 hours (depending on the battery) it is also possible to supply the operating power using a direct current source (7-14 V, 500 mA) and a USB slot (5 V, 1 A)
RTC	Integrated buffer battery was factory adjusted (calibrated) with an error < 26 sec. in 30 days (< 10 ppm, (25 ±16)°C). It guarantees the working continuity of the system clock even during the replacement of the main batteries
Menu language	English, Chinese, Portuguese, Spanish, German, French
Program update	Firmware update using the USB slot with connection to our Server
Ambient conditions	temperature: -10°C to 50°C humidity: 20-90%, relative humidity
Real time temperature	real-time temperature indication on the main screen
Dimensions	70 × 300 × 36 (L × A × P)
Supply kits	sound level meter instrument complete with amplifier CCP with a TNC connector and class 1 microphone Microphone windscreen microSD memory card with a capacity of 4 GB for saving data 9V/500mA power supply unit data management software downloadable directly from our website "www.arwmisure.it" USB cable for PC connection supplied in a sturdy carrying case
Weight	About 620 g with the 4 alkaline batteries
Acoustic calibrator	ARW2020, Class 1, 94dB/114dB, 1kHz



DIFFERENTIAL PRESSURE GAUGES



ARW 8890

For order [220121432](#)

The ARW 8890 is a differential pressure gauge that allows you to measure pressures in 11 different selectable scales. Particularly suitable in the plumbing and heating sector, in the air conditioning and heating fields.



TECHNICAL SPECIFICATIONS

Accuracy	± 0.3 % FSO
Repeatability	±0.2% (Max +/- 0.5% FSO)
Linearity	± 0.29% FSO
Measuring range	± 5psi (±138.3 in H2O ± 345 mbar)

Resolution	in H2O	0.1
	psi	0.001
	mbar	0.1
	kPa	0.01
	inHg	0.001
	mmHg	0.1
	ozin2	0.01
	ftH2O	0.1
	cmH2O	0.01
	kgem	0.001
	bar	0.1

Dimensions	210 mm x 75 mm x 50 mm
Weight	280g

EMC
EN: 50081 - 1, 50082 - 1

- Large backlit display
- Data hold function
- Function ,max, min, average
- Zero value setting
- Low battery indication
- Auto power off function

Supplied complete with silicone tubes, software complete with USB cable, ABS case and user manual.



PIPES AND CABLES LOCATOR

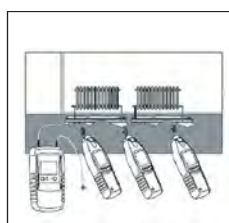
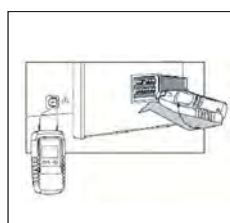
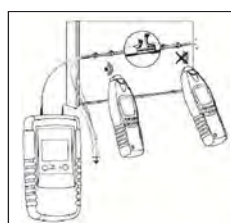
ARW-1012

For order [220121759](#)

The ARW-1012 service finder is a portable digital instrument used in various application sectors for the search and location of pipes, electric and telephone cables, as well as the identification of the path of the service or the electric/telephone line with search for any interruption or break.



- Search and locate pipes and cables in the wall, open circuits, short circuits in conductors
- Identification of the path of the pipe and power line in the ground
- Identification of protective devices and correlation to electrical circuits
- Search and locate accidentally plastered sockets and distribution boxes
- Identification of interruptions and short circuits in underfloor heating and radiant panels
- Search and trace the route of metallic water and heating pipes
- All fields of application (isolated and live) are covered without ancillary devices
- The display in the transmitter indicates the transmission level, the transmission code, as well as the stray voltage
- The display in the receiver indicates the reception level, the transmission code as well as the detection of the mains voltage
- Automatic and manual sensitivity setting
- Reception acoustic signal can be deactivated



RECEIVER

Cable search sensitivity	0...2.5m (wall/underground)
Main voltage	0...0.4 m
Dimensions	128x68x30 mm
Weight	About 185g

TRANSMITTER

Operating range	12V, 50V, 120V, 230V, 400V
Frequency range	0...60 Hz
Transmission frequency	125 kHz
Voltage	Up to 400V AC/DC
Temperature range	0° C ~ +40°C
Dimensions	190x60x37 mm
Weight	229 gr

ARW 1301 *For order* **220121182**

Light meter "luxmeter"

Compact and simple instrument, with a single switch for choosing the measurement scale.

TECHNICAL SPECIFICATIONS

Measurement range from 0.01 lux to 50,000 lux
Accuracy +/-5% of reading or +/-10 dgts
Integration time 1.5 times per second
MAX-HOLD function for detecting the maximum brightness value
Low battery warning
Dimensions 120x64.5x24.5 mm - sensor dimensions 115x60x27 mm - Weight 160 g
Supplied complete with case, measurement sensor, battery and user manual



ARW 8809 A *For order* **220121577**

Light meter "luxmeter"

Professional digital portable luxmeter equipped with an external sensor capable of detecting brightness up to 400,000 Lux. The visualization takes place through a large backlit display for numerical visualization and with an analogical bar of the measured value. Particularly suitable for environmental control in the workplace, in industrial applications, in public and private environments, in the photographic sector, in floriculture and in various professional fields for determining the degree of brightness of any environment. Equipped with a USB data output for connection to a PC and a software for downloading and managing data.



- Display capacity 4000 points
- Automatic range selection
- Peak hold function
- Detection of max/min values and "Hold" reading lock
- Auto power off function
- Low battery indication
- FC/Lux selectable unit of measurement
- Memory capacity 99 data, using a PC, real - time acquisition function

EMC
EN: 61326

TECHNICAL SPECIFICATIONS

Measuring range	400.000 Lux
Precision	+/-5% - +/-10dgt (<10.000Lux) +/-10% - +/-10dgt (>10.000Lux)
Resolution max.	0.1Lux (up to 400Lux) « Display 4000 points »
Sampling time	1,5 sec
Tool dimensions	203x55x70mm
Sensor size	115x60x27mm
Weight	280gr



Supplied complete with 9V battery, external sensor, USB cable, software CD, case and user manual

see page 9 hot anemometer



ARW 125-G [For order](#) **220122354**

Moisture meter

Hygrometer for materials used to detect the level of humidity present on wood and building materials (plaster, concrete, mortar, gypsum, expanded polystyrene, cement, etc.) by selecting different groups. It is also possible to carry out measurements on cardboard and paper using the special accessories supplied. This simple, compact and ergonomic instrument with a non-slip handle offers a large graphic display with indication of the humidity value of the material in % with respect to the dry mass.



EMC
EN: 61326

- Large backlit graphic display
- Supplied complete with separate electrodes for various applications
- Direct reading also through built-in electrodes



Supplied complete with: instrument with built-in electrodes, connector for connecting external probes, hammer electrode, blade electrode and electrode extensions.



TECHNICAL SPECIFICATIONS

Measurement principle	By electrical resistance
Length of the electrodes	8mm
Electrodes	Integrated, replaceable
Measurement range	Wood 1±75%; Construction 0.1±2.4%
Room temperature	-40 to 70°C
Ambient relative humidity	0~100%
Accuracy - Wood	0~30% = ±1% 30~60% = ±2% 60~75% = ±4%
Accuracy - Other materials	±0.5%
Ambient temperature measurement	-40°C ~ -10°C and +40°C ~ +70°C = ±2°C -10°C ~ +40°C = ±1°C

Room relative humidity measurement	0~20% e 80°C ~ 100% = ±5.0% 20~80% = ±3.5%
Auto power off	after about 3 minutes of non-use
LCD backlight	automatic shutdown after about 10 seconds of non-use
Battery	3 × CR 2032
Custody	impact resistant plastic
Operating conditions	160x60x28
Ambient relative temperature	0~40°C
Ambient relative humidity	0~85%RH
Dimensions	160x60x28 mm
Weight	203 g

ARW-63 [For order](#) **220123118**

Non-destructive Wood hygrometer

Induction hygrometer for wood used to measure the degree of humidity present in the wood without damaging its surface. Compact and simple to use instrument, equipped with a large backlit graphic display and 8 selectable measurement scales to accurately detect the presence of humidity in all types of wood. Ideal and indispensable tool for floor and building engineers and all those who want to perform a complete check and identify any signs of leaks, deterioration of humidity or any parts damaged by water.

Ideal in the production sector of the construction industry, the woodworking industry, in industrial sawmills and in all cases of non-destructive measurement of the finished product.

- Compact and handy instrument, equipped with a large backlit display
- Non-destructive measurement by simply placing it on the surface (measurement depth 5cm)
- 8 measurement scales selectable according to the density of the wood (measurement depth 5cm)
- Temperature measurement and unit conversion
- Setting the limit value of humidity: when the humidity value is greater than or equal to the limit value, the "x" icon will be displayed, otherwise the "v" icon will be displayed.
- Auto power off function
- Battery level indication
- Very precise zero setting function in case of significant changes in ambient temperature



- 8 kind of Geardensity adjustable
- Moisture limit value setting, icon "X" "v" reminder
- Built-in induction chip Protect work surfaces
- Data hold function



TECHNICAL SPECIFICATIONS

Humidity measurement range	0.5% ~ 79.5 %
Temperature measurement range	0 °C ~ 50 °C/32 °F ~ 122 °F
Measurement error/humidity value	± 1.5%
Temperature value	± 2 °C / ± 3.6 °F
Wood density range	0.27 g/cm³ - 1.05 g/cm³
Detection depth	0mm ~ 50mm
Dimension	63.6*31*125.8mm
Weight	146g

ARW-220

Ergonomic digital phmeter

Suitable for multiple applications: In the food sector in general, in the control of drinking water, lakes and rivers, in the fish sector, in schools, in swimming pools, in analysis laboratories and in all Quality control processes where necessary the measurement of PH.

- Compact, easy to use.
- Equipped with a separate electrode to facilitate use in any situation
- Measurement scale from 0 to 14.00 pH
- Autocalibration function for pH 4, pH 7 or pH 10
- Temperature self-compensation without the need for any setting.
- Water-proof protection degree, IP65
- Supplied complete with separate "PH" electrode and pH 4 and pH 7 calibration solutions
- Reversible display for easy reading at any angle
- Data hold function for blocking reading
- "Auto power off" function

SPECIFICHE TECNICHE		
Display	LCD, size : 20mm x 28mm.	
Measuring range	0 - 14 pH x 0.01 pH resolution	
Precision	± 0.07 pH (pH 5 to pH 9)	
	± 0.1 pH (pH 4 to pH 5 and pH 9 to pH 10)	
	± 0.2 pH (pH 1 to pH 4 and pH 10 to pH 13) * 23± 5 * After calibration	
Temperature self-compensation	Automatic	
Sampling time	Approx. 0.8 seconds	
Operating temperature	0°C to 50°C (32°F to 122°F)	
Operating humidity	Below 80% RH	
Calibration method	Auto Calibration, pH 7, pH 4 (or pH 10)	
Power supply	DC 1.5V, 4 batteries (UM-4/AAA)	
Dimensions	Tool: 180 x 40 x 32mm (7.1 x 1.6 x 1.3 inch)	
	Electrode: 220 version: 9.5 mm diam. x 120mm	
	220S version: 12mm dia. x 160mm	
Electrode cable length: approx. 1 m.		
Weight	220 g/0.48 LB (including electrode)	
pH electrode	Epoxy with BNC connection	
Supply kits	Instrument body	1 PC
	Solution pH 7.00, PH-7A	1 PC
	Solution pH 4.00, PH-4A	1 PC
	Custody	1 PC



Ideal for measuring multiple products: in industry for galvanic and chemical measurements, in the food sector for measurements on semi-solid products, meat, cheese, pasta, fruit, etc. in agriculture for measuring land and products and in all cases a penetration measurement is required (the electrode can also be used to measure liquids).

- Penetration electrode with glass tip

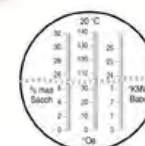
REFRACTOMETER

Designed for measuring sugar content. With a few drops of sample, the percentage of dissolved solid is determined, according to the principle that the refractive index of a dissolved solid is proportional to its concentration. This is a simple, accurate and particularly useful method for quality control of fruit, jam, vegetables, tomato, beet sugar, canned food, grapes, musts, etc. This revolutionary new instrument makes measurements possible without problems related to temperature variations, eliminating the inconvenience of temperature compensation, an operation that was once indispensable in refractometric measurements.



ARW R1	
Stairs	0-32% Brix/ATC
Precision	0,2%

ARW R2		
Stairs	0-26% Babo	0-140° Oechsle
Precision	0,2%	1°
		0-32% Brix/ATC
		0,2%



ARW R1

For order **220121438**

ARW R2

For order **220121439**

ARW-DJ [For order 220122457](#)

Porosity detector "Holiday Detector"

The ARW-DJ scintillograph is used to detect the degree of porosity present on coatings with a test voltage up to 30kV for very thick coatings.

APPLICATIONS

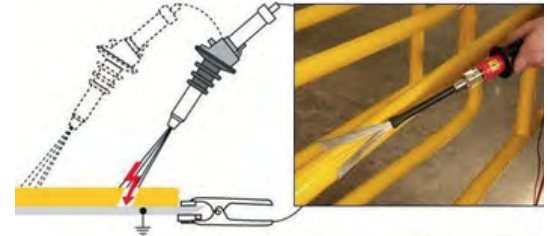
Used for detecting the degree of porosity on insulating type protective coatings in various applications on conductive substrates where anticorrosive coatings play a very important role. Particularly used in the control of coatings on pipes (Pipeline), tanks, valves, gas pipelines, oil pipelines, in the petrochemical sector and in the analysis of porosity on enamels and protective paints.

TEST PRINCIPLE AND METHOD

The ARW-DJ Porosity Detector is composed of an instrument body able of supplying a constant and user-adjustable voltage. Through an insulating handle connected to a brush, voltage is transferred to the coated material to be inspected with the aim of verifying any defects, imperfections, porosity or lack of coating present on the surface. If pinholes exist in the protective coating or the coating is too thin, the detector will release a spark and provide an audible signal alerting the operator of the defect found.



- Low power consumption, small size and light weight
- Simple, intuitive operation
- Indication of output voltage and voltage of power

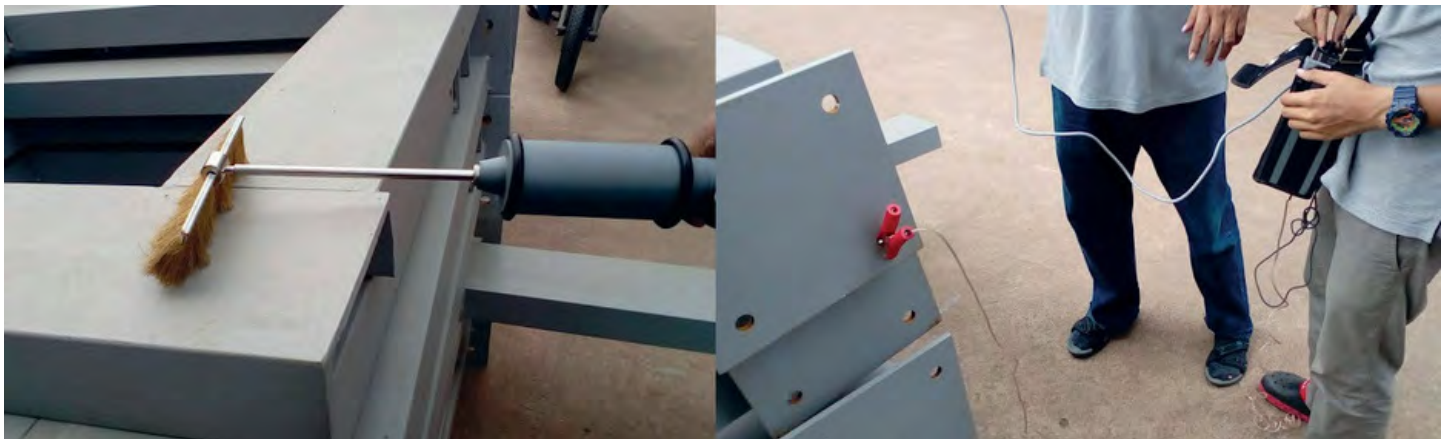


TECHNICAL SPECIFICATIONS

Output voltage	0.7 kv to 30kv
Measurement Range	Coatings 0.5 mm ~ 10.0 /12.0 mm
Battery	12V/2800mA
Consumption	6W
Dimensions	220mm x 130mm x 88mm
Response Time	0.5 Seconds Typical
Weight	2.2kg
Backlit display	
Alarm function with earpiece and buzzer	
Auto shut-off function	
Reference standards, AS3894.1 and NACE standards	

Delivery kits:

Power supply Battery charger, probe handle, grounding cable, flat brush with brass wires 250mm, fan brush, headphones, carrying case and carrying case.



ARW-T05 [For order](#) **220122885**

Pull-off coatings adhesion test

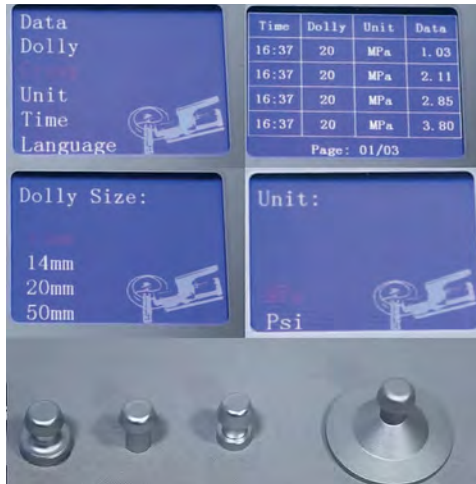
The ARWT05 pull-off adhesion tester is a manually operated portable instrument which, using hydraulic pressure, allows to measure the force necessary to "tear off" a portion of the coating from its substrate, determining the degree of adhesion of the coating to the base material. compliance with ISO 4624 specifications.



- **Portable design**, can be used anywhere quickly and easily
- **Built-in rechargeable lithium battery**, don't need any external power source
- **Flexible**, with direct selection of four different dolly sizes for different resolutions and test ranges (Standard 20mm)
- Visualization of the result directly on the LCD display
- **Complete supply kit**: instrument body equipped with display and controls, 20mm platforms (Dolly) n° 20 pieces, circular saw, 3M platform bonding adhesive, micro USB cable for PC connection, calibration certificate, user manual and ABS case
- **High accuracy**, each pressure system is calibrated with 1% accuracy against NIST traceable load cells
- Equipped with a high-precision professional sensor that guarantees a resolution of 0.01 MPa
- Hook and pull system ensures reliable test results for smooth or uneven surfaces
- **Complies with** ASTM D4541, ISO 4624, ASTM D7234, ISO 16276-1 standards
- Automatically stores all test results that include max power. achieved, pull-off power, jerk rate, dolly size and time
- Two selectable units of measure, MPa and PSI which can be converted automatically.
- **No software is required**, the ARW-T05 Pull-off test, once connected to the PC with the supplied interface cable, is automatically recognized as a "U" disk, and the data recorded during the test can be read automatically
- **Extremely rugged construction** and waterproof, dustproof, and shockproof design meets even the most hostile operating environment



Supplied in a sturdy plastic case



Time	Group	Count	Total	Dolly	Unit	Data
9:11:49	1	1	20	20 MPa		1.15
9:11:51	1	2	20	20 MPa		2.04
9:11:52	1	3	20	20 MPa		3.01
9:11:55	1	4	20	20 MPa		4.11
9:11:57	1	5	20	20 MPa		5.36
9:11:58	1	6	20	20 MPa		6.08
9:12:00	1	7	20	20 MPa		7.12
9:12:02	1	8	20	20 MPa		8.2
9:12:04	1	9	20	20 MPa		9.22
9:12:06	1	10	20	20 MPa		10.09
9:12:08	1	11	20	20 MPa		11
9:12:10	1	12	20	20 MPa		12.28
9:12:11	1	13	20	20 MPa		13.15
9:12:14	1	14	20	20 MPa		14.24
9:12:16	1	15	20	20 MPa		15.12

TECHNICAL SPECIFICATIONS

Measurement scale	0÷3000 PSI / 0÷20 MPa resolution
Resolution	1 PSI / 0.01MPa
Precision	± 1% full scale
Platform size "Dolly"	20mm standard (10/14/50mm optional)
Custody	360x75x115mm
Power supply	Lithium rechargeable batteries
Weight	3 Kg

- KIT ARW-2/1C 0÷60µm** (1mm blade space) [For order 220122702](#)
- KIT ARW-2/4C 60÷120µm** (2mm blade space) [For order 220122703](#)
- IT ARW-2/6C 120÷250µm** (3mm blade space) [For order 220122704](#)

"Cross Hatch" Coating Adhesion Test

Compact tool with ergonomic handle with a simple and quick coupling system of the cutting blade, no additional key needed. Complies with ASTM D3359 - ISO 2409 standards.

8 POSITIONS BLADE BLOCK: Equipped with 8 blade positions, this means the possibility, once the cutting edges are worn out, to rotate the blade block in 8 different positions offering a longer life than models with single blade or 2/4/6 blade positions. (duration equal to 8 times the single blade version)



Supply: ABS case complete with handle, blade block (1/2/3mm depending on the model chosen), brush, magnifying glass, roll of adhesive tape.

CROSS HATCH TEST

This method specifies a procedure for determining the resistance of paints and coatings to separation from substrates when a cross-grain is made at right angles across the paint all the way to the substrate.

The method can be used for a pass/fail test. In the case of multilayer systems it is possible to determine the adhesion between the different layers.

TEST METHOD

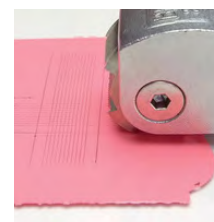
- Make a cross incision on the coating until it reaches the substrate, a checkerboard will be created made up of small squares of 1, 2 or 3mm size, depending on the model used.
- Brush diagonally 5 times each, using a brush, or apply suitable tape to the cutout and remove
- Observe the grating area using a magnifying glass verifying the degree of adhesion according to ISO2409

TECHNICAL SPECIFICATIONS

Model	ARW 2/1C	ARW 2/4C	ARW 2/6C
N° blades	8	8	8
Blade distance	1 mm	2 mm	3 mm
Coating thickness	0÷60µm	60÷120µm	120÷250µm
Reference standard	BS 3900 E6 BS/EN ISO 2409 ASTM D 3359 D 3302		



change blades



Test method

VISCOSITY CUP

ARW-125/4 [For order 220122919](#)

Viscosity Cup

Ford ARW-125/4 viscosity cup is used to quickly and easily determine viscosity in liquids, built entirely in aluminum with anodic oxidation completed with removable stainless steel orifice is manufactured in accordance with international standards ASTM D1200, D333 and D365. The Ford 4mm version is most commonly used for quick and easy viscosity measurement of paints, inks, lacquers and other liquids.

- Entirely built in anodized aluminum with stainless steel nozzle
- Complies with international standards ASTM D1200, D333 and D365
- High manufacturing tolerance ±2%
- Optional support tripod
- Other sizes also available on request

TECHNICAL SPECIFICATIONS

Internal diameter	50 mm ± 0,05 mm
Outer diameter	86 mm ± 0,1 mm
Internal vertical height	43 mm ± 0,1 mm
Orifice length	10 mm ± 0,1 mm
Internal	



ARW-130

Viscosity cup support stand with built-in level



How do you use the viscosity cup?

- Bring the liquid sample and cup to the temperature required to perform the test
- Make sure the cup is perfectly clean and free from marks and impurities
- Place the viscosity cup on a suitable support making sure it is perfectly level
- Close the nozzle opening with your finger.
- Fill the cup to the brim making sure that the sample is free of bubbles or any other impurities.
- Use a glass plate by pushing it from one side to the other in order to eliminate the excess liquid in the border and close by sealing the cup and close the cup with the glass plate.
- Place a container to collect the sample under the cup.
- At this point remove your finger from the hole underneath
- Equip yourself with a stopwatch and prepare for the test
- Clear the hole and place the cup on the pedestal
- Remove the glass plate by sliding it and start the stopwatch at the same time, the timeliness of starting the stopwatch as soon as the flow starts is essential
- Promptly stop the stopwatch at the end of the flow and you will get the result



ARW- 265 For order **220122798**

Colorimeter Spectrophotometer

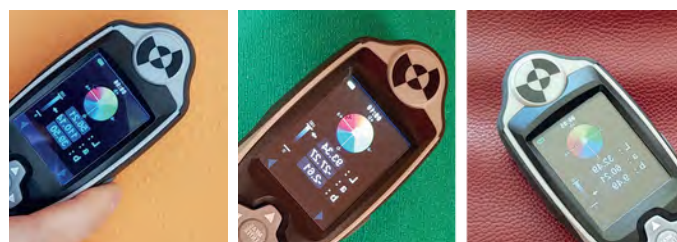
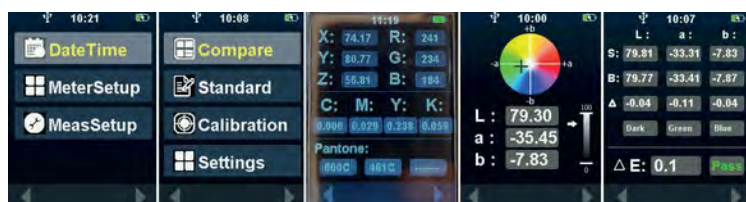
The ARW-265 Colorimeter has been designed to provide a stable and precise color comparison ensuring the reliability of the result obtained without the danger of personal interpretations. Visual assessment is certainly not the way to go today and even using traditional colorimeters or pantone color swatches is no longer sufficient in some situations. The measurement technology based on the CIE L*A*B* guarantees a reliability of the measurement with the certainty of the final result without questionable interpretations. Let's avoid complex, unwieldy and often complicated to use instruments and let's rely on a simple, compact device suitable for measuring in every situation. Don't underestimate color quality control! The benefits you can get are:

- Check and compare variations of color formulas in the production phases
- Verify batch-to-batch variations of final products
- Effectively monitor your suppliers by creating a single standard
- Obtain a homogeneous production process guaranteeing color stability and quality
- Eliminate personal visual interpretations, all are based on concrete results provided by the device without errors of evaluation
- Generate color variations and maintain the reference standards for production. Technology and practicality at the service of innovation



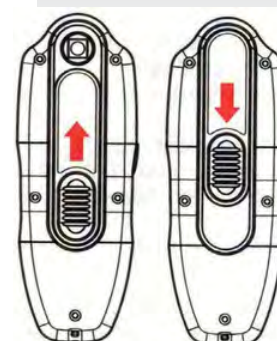
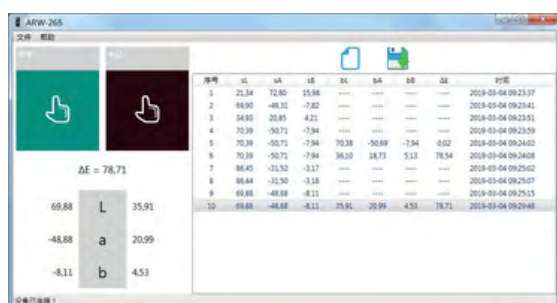
The fields of application of the ARW-265 spectrophotometer can be many, It can be used for evaluation in the plastic sector, in printing, in painting, weaving and dyeing, in household appliances and household goods, in building materials, in consumer electronics, in food items, toys and more. The measurement of Lab, RGB, CMYK, color difference ΔE and ΔLab color sample data according to the CIE color space for a color comparison

TECHNICAL SPECIFICATIONS			
Color management software	Free to download	Short-term repeatability	$\Delta E < 0,1$
Memory capacity	For 5 standard samples and 1000 reading records	Measurement geometry	45°/diffuse lighting
Repeated accuracy	$\Delta E < 0,1$	Light source	D65/RGB LED
Display	LCD TFT true color 2,0 inch 320x240	Sensor	RGB Silicon Photoelectric diode
Interface	USB2.0 Full Speed	Observation angle	CIE 10°Standard
Real Time Data Management Software	Time	Measurement range	1.5Sec
Color space	CIELAB CIEXYZ RGB	Power supply	Li-ion battery, USB charging support, (duration about 1000 measures)
Color difference formula	ΔE^*Lab (CIE76/CIE94)	Operating conditions	0÷40°C / Humidity <80%RH without condensation
Measurement area	$\psi 8mm$	Equipment	3.7V Li battery, Carrying case



SOFTWARE

DOWNLOAD DIRECTLY FROM OUR WEBSITE
"www.arwmisure.it"



Equipped with a built-in calibration plate



GLOSSMETERS



ARW-H60 ARW-H2068S ARW-H2068T

ARW-H60 [For order 220122792](#)

ARW-H2068S [For order 220122793](#)

ARW-H2068T TOUCH [For order 220122794](#)

Series of Glossmeters

The ARW Professional Portable Glossmeter Series offers a complete solution for any surface gloss measurement application and need. The various models are distinguished by the measuring optics, single-angle 60° and multi-angle 20°/60°/85°, as well as by the technical and functional specifications. The ARW-H60 version of the portable glossmeter reads at an angle of 60°, while the versions ARW-H2068S and ARW-H2068T are able to

measure in all three angles in the same time (glossmeters three angles 20/60/85°). The ARW-H2068T portable glossmeter model is the top-of-the-range triangle version with a Touch screen display and a simple and intuitive internal navigation menu with setting and setting functions.

Thanks to the supplied software it is possible to transfer and store data for the creation of detailed analysis reports with graphical and statistical functions. For all versions it is used to set the various parameters of the instrument.

Fields of application: The glossmeter is an instrument used to measure the degree of gloss of surfaces, they can be used for measurements applied to paints, inks, drying varnishes, coatings, wood products, marble, granite, glazed polished tiles, ceramics, brick and porcelain, plastic, paper and more.

- Compact and solid structure with ergonomic handle
- Simple to use with a single function key
- Large backlit display (Touch screen for the ARW-H2068T version)
- Data transfer and management software
- Date time function
- Supply kit

- Instrument
- Adapter for recharging
- USB interface cable
- Calibration plate
- Cleaning cloth
- Software CD
- Carrying case

- Not Present | o Supplied as standard

	FUNCTIONS		
	ARW-H60	ARWH2068S	ARW-H2068T
Measurement optics	Mono Angle 60°	Triangle 20° - 60° 85°	Triangle 20° - 60° 85°
Internal menu	-	-	0
Touch screen display	-	-	0
Backlight Display	0	0	0
Date and time	0	0	0
Calibration basis	0	0	0
Memory	1000 readings	1000 readings	Advanced Memory: Basic 1000, Statistics: 5000 Continued: 5000
Data statistics	-	-	0
USB cable	0	0	0
Test certificate	-	-	-
Internal accumulator rechargeable	0	0	0
N. of readings displayed on the angle display	5	5 for each corner	5 for each corner
Software	0	0	0



SOFTWARE



	TECHNICAL SPECIFICATIONS		
	ARW-H60	ARWH2068S	ARW-H2068T
Measure angle	60°	20° 60° 85°	20° 60° 85°
Measurement area	9x15	20°:10x10, 60°:9x15,85°:5x36	20°:10x10, 60°:9x15,85°:5x36
Resolution		0,1GU	
Repeatability	0-300GU	±0,2GU (0-100GU) ±0,2%GU (100-2000GU)	
Accuracy		Complies with JJG696 first class gloss meter working requirements	
Color match		Corresponding with CIE 1931 (2nd) under CIE C light source.	
Measurement time		0.5sec	
Display	3.5inch TFT, resolution 320*480	3.5inch TFT, 320*480 resolution	
Operating conditions		0~40 °C (32~104°F) / <85% Non-condensing relative humidity	
Interface		USB	
Rechargeable power supply		3200mAh Li-ion Battery, >5000 readings (about 8 hours)	
Reference standards		ISO 2813, GB/T 9754, ASTM D 523, ASTM D 2457	
Dimensions		160x75x90mm	
Weight		350g	
Software		GQC6 Quality Control Software with QC Report Printing Function (More extensive functions for model ARW-H2068T)	

DUROMETER FOR COATINGS



ARW-506/2 [For order](#) **220123044**

ARW-506/3 [For order](#) **220123045**

Wolff Wilborn Pencil Coating Durometer

This instrument offers a quick and easy method for determining the film hardness of a coating applied to a flat substrate according to the Wolff Wildorn method.

The test consists in the use of pencils of different degrees of hardness dragged on the surface through a specially designed trolley at an angle of 45° and pushed with a uniform pressure on the sample, all in compliance with the reference standards governing this method of measurement. ASTM D 3363, ISO 15184.

- Complies with international reference standards ASTM D 3363, EN 13523-4, ISO 15184:2012, JIS K 5600-5-4
- Built-in level located on top of the cart, convenient for checking level during testing.
- Test angle 45° and thrust with uniform pressure on the sample
- 2 different models available, Pencil lead pressure: 750g/1000g.
- Only three points of the surface are touched (cartwheels and pencil).



TECHNICAL SPECIFICATIONS

Models available	ARW-506/2 ---- (750g / 7,35 N ± 0,1 N)
	ARW 506/3 ---- (1000g)
Pencil opening angle	45°

Supply Kit:

- Trolley instrument body
- Set of 12 pencils (4B - 3B - 2B - B - HB - H - 2H - 3H - 4H - 5H - 6H)
- Special pencil sharpener
- Sandpaper, 400 grit
- Manufacturer's calibration certificate

"PIG" COATING THICKNESS GAUGE

ARW- S548 [For order](#) **220123045**

ARW-S548 is a mechanical Thickness Gauge used for coating layer thickness measurement in destructive mode, suitable for use in all cases where conventional electromagnetic measurement techniques are ineffective. Specifically, it finds particular application in measuring the thickness of paint on substrates such as wood, concrete, plastic and other non-metallic substrates.

The ARW-S548 test is based on the standard wedge cutting procedure, the coating is cut by dragging a blade specially inclined at a defined angle, so that the cut penetrates the coating up to the substrate. The thickness or thicknesses of the different coating layers are visually identified and calculated based on the conversion factor of the blade used. The visualization and measurement of the layers is done using the built-in microscope equipped with an illumination source and a metric graticule for measuring the size of the cut for each single slice.

- Solid and sturdy, made of a black painted aluminum block which houses the following elements
- Equipped with a practical selector for choosing the cutting blade (4 cutting blades supplied with the instrument)
 - N°1 cutter: measuring range: 20-2800µm (Conversion factor: 20) or N°2 Cutter: measuring range: 10-1400µm (Conversion factor: 10)
 - N°3 Cutter: measuring range: 5-700µm (Conversion factor: 5)
 - N°4 Cutter: measuring range: 2-280µm (Conversion factor: 2)
- Built-in measuring microscope with a magnification of 30X and a metric reticle for measuring (2.8 mm with 1/140 division), also useful for any inspections
- Equipped with two sliding wheels to increase stability and sliding making the cut more precise and uniform.
- Battery compartment for 1.5 V battery pack. Combination of LED and fiberoptic light guide for optimal illumination of the sample at low power consumption.
- Built in compliance with ASTM D 4138, AS 1580 Meth 408.1 standards

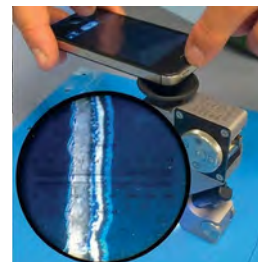


Supply Kit:

- 4 cutting blades
- Highlighter pen
- ABS case
- Hex key for blade assembly

TECHNICAL SPECIFICATIONS

Measuring range	2 ÷ 2800 µm (depending on the selected blade)
Light source power supply	1 x 1,5V AAA
Dimensions	110x85x25mm
Weight	500g
Reference standards	ASTM D 4138, AS 1580 Meth 408.1



Coating Thickness Gauges



For coatings on ferrous (magnetic) materials

ARW 826 F [For order 220121334](#)

For coatings on ferrous and non-ferrous (magnetic and non-magnetic) materials

ARW 826 FN [For order 220121335](#)



Ideal for any type of coating (paint, plastic, zinc, chromium, rubber, ceramic, etc.) on "FE" magnetic metal bases (versions 826 F - 826 FN), the 826 FN version also allows you to measure coatings (paint, plastic, anodization, chrome, rubber, ceramic, etc.) on non-magnetic metal bases "NFE".

- High value for money
- Complete with separate probe with extensible cable suitable for any type of flat or round surface
- Simple and fast calibration with the supply of 4 reference thicknesses (50 - 100 - 200 - 500 µm)
- Large 4-digit LCD display
- Low battery warning
- Supplied complete with ABS case, measuring probe (2 for the 826 FN version), zeroing base, 4 calibration foils and user manual.

TECHNICAL SPECIFICATIONS	
Measuring range	0-1200 µm FE (FE-NFE version 826 FN)
Resolution	0.1 µm up to 100 µm - 1 µm up to 1200 µm
Accuracy	3% of reading or ± 2 µm
Operating temperature	0 + 50°C
Operating humidity	< 80%
Power supply	4 x 1.5V batteries (AA-UM3)
Instrument size	161 x 69 x 32 mm
Probe size	Ø 15 mm - H 55 mm

Optional accessories for ARW 826 F - ARW 826 FN

- Additional reference thicknesses (values on request)

ARW-157 [For order 220122387](#)

Thickness gauge for coatings

Coating thickness gauge ARW-157 dual technology "FN" with built-in probe suitable for measuring coating thickness on ferrous (iron, carbon steel, cast iron, etc.) and non-ferrous (aluminium, stainless steel, copper, etc.). The instrument is equipped with an internal memory for 2500 readings divided into 50 groups which can be downloaded via Bluetooth interface directly to a PC.



- "FN" dual technology built-in probe
- Large backlit display
- Selectable CONTINUOUS and SINGLE measurement mode
- Software data transfer via PC (MAX AVERAGE "AVG", N° READINGS AND S.D.)
- One or two point calibration
- Data memory for 2500 values (divisible into 50 groups) (data is visible and downloadable from the instrument)
- High contrast display
- Power off function
- Selectable "HI" and "LOW" alarm
- Low battery indicator
- Bluetooth interface with supply of software CD for data transfer and analysis



Mobile App available



OUT OF STOCK

FANTASTIC! NOW MEASUREMENT OF COATING THICKNESS BECOMES A QUICK AND SIMPLE STEP IN ANY APPLICATION!

- Supply kit
- N°2 Reset base "F" and "N"
 - Verification thicknesses
 - Software CDs
 - Case and user manual

Mode	Ferrous	Non-ferrous "N"
Measuring range	Magnetic induction	Eddy current
Accuracy	0-2000µm (+2% / ±2µm)	0-1000µm (+2% / ±2µm)
Resolution		
Radius min. Of the piece	1.5mm	3mm
Measurement area	7mm	3mm
Minimum thickness substrate	0.5mm	0.3mm
Operating temperature		0 ~ 40°C (32 ~ 104°F)
Dimensions		113.5 X 54 X 27 mm
Weight		110gr

THICKNESS GAUGE FOR COATINGS



ARW-1920 [For order 220123151](#)

"FN" dual technology coating thickness gauge for ferrous and non-ferrous substrates (magnetic and non-magnetic), equipped with a data logging function and supplied complete with USB interface and data transfer and management software. A perfect solution for any measurement of the coating layer, be it painting, enamelling, zinc plating, chrome plating, aluminum anodizing, etc.

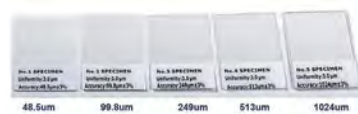
- Compact and solid structure with dual technology (Fe - NFe) and large backlit display
- Internal data memory (500 groups of 15 values each)
- **Supplied complete with software and interface cable for data transfer and management to PC**
- Two measurement modes, single and continuous (scan function)
- Two measurement modes: Direct and Batch
- Limit value entry function
- Auto power off function
- **Statistical function with indication of values: Minimum, Maximum, Average, No. of readings and standard deviation**
- 5 sample reference thicknesses included in the delivery (48.5µm, 99.8µm, 249µm, 513µm, 1024µm - indicative values)
- **Unique measure with a single dual technology probe** (Fe & NFe with automatic substrate recognition) for ferrous and non-ferrous substrates

Measurement principle

- Magnetic Induction (Fe): measures non-magnetic coating layer on magnetic ferrous metal bases As paint, zinc, aluminum, chromium, copper, rubber on iron substrates, cast iron, magnetic steel alloys
- Eddy Current (NFe): measures non-conductive coating layer on non-ferrous non-magnetic metallic bases such as rubber, plastic, paint, oxidation (anodizing) on substrates in aluminium, copper, zinc, tin, etc.



TECHNICAL SPECIFICATIONS	
Measuring range	Magnetic Induction (Fe) & Eddy Current (NFe)
Measuring range µm	0 - 1500 µm FE/NFE
Probe	Double technology (Fe/NFe)
Instrument body	In plastic material
Accuracy	± (2% measured value + 1) µm
Resolution µm	0,01 µm
Minimum bending radius mm	Convex 1.5 Concave 9
Minimum diameter (mm)	ø7
Minimum Substrate Thickness (mm)	0,5 mm
Data storage	500 groups of measures
Dimensions	163x78x33 mm
Power supply	3 1.5V batteries
Operating temperature	0+50 °C
Operating humidity	<80%
Supply kits	Instrument, Probe (Fe - NFe), 2 zero bases (Fe - Nfe) Software and USB cable, 5 sample thicknesses, user manual, ABS case



SOFTWARE



COMB THICKNESS GAUGE

ARW-1150 [For order 220121056](#)

ARW-1701 [For order 220122846](#)

ARW-1701 version in steel

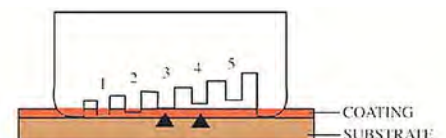


ARW-1150 aluminum version



This comb thickness gauge is used for measuring the coating thickness of wet film even before drying. Simply place the toothed surface perpendicularly on the wet coating and then visually check the maximum value reached. The wet film thickness gauge is a very useful item in situations where immediate thickness control is required. Particularly used in the field of building paints, in road signs and in industry for measuring the depth of a coating of paint, enamel, lacquer, adhesive or other materials that have been applied on a smooth surface.

- Simple to clean
- Compact dimensions
- ARW-1150 range 25 ÷ 2000 µm in aluminium
- ARW-1701 range 25 ÷ 3000 µm in steel



THICKNESS GAUGES FOR COATINGS



ARW-2300 [For order 220123117](#)

Instrument able to measure the thickness easily, quickly, non-destructively and accurately of the non-magnetic coating on magnetic and non-magnetic metallic substrates. At the same time, the ARW-2300 automatically identifies magnetic metal substrate and non-magnetic metal substrate. Equipped with a large high-definition color display, it allows you to identify the values clearly and precisely. The ARW-2300 finds particular application in the coating industry, industrial painting, car bodywork, electroplating industry, metal working industry, chemical industry, product inspection and testing and other verification areas.

- Menu operation and **large HD color screen display**
- **Dual technology**, measuring the thickness of the non-magnetic coating on the surface of the magnetic metal substrate and the non-metal coating on the non-magnetic metal substrate
- **Two measurement methods:** single measurement and continuous measurement
- Basic calibration and zero point calibration available
- **Setting of limit values (alarm)**, with indication of exceeding also through the distinction of color of the visualization on the display both on the direct reading and within the memorized data to make identification more evident and quicker
- Selection of metric/imperial units of measure (micron/inch)
- **Screen rotation function**, allows you to read easily at any angle of measurement
- Charging protection, multi interface display, screen brightness selection
- Internal data memory (viewable only directly from on the instrument)
- **Data statistics function and graphic visualization** of the measurements directly on the display
- Auto power off function



- Supply Kit:**
- Instrument
 - User manual
 - USB cable for charging
 - 5 sample thicknesses
 - 2 Zero Bases (F/FN)
 - ABS case



TECHNICAL SPECIFICATIONS

Measuring range	0~1300 μm/51mil
Resolution	(0.1μm (100um).1μm (≥ 100um))/0.1mil
Measurement error	≤150μm±(3%H+1μm)
Minimum diameter of the magnetic metal substrate	12 mm
Minimum thickness of magnetic metal substrate	0.5 mm
Minimum radius of curvature for convex magnetic substrate	2 mm
Minimum bend radius for concave magnetic substrate	11 mm
Minimum diameter of non-magnetic metal substrate	50 mm
Minimum thickness of non-magnetic metallic substrate	0.5 mm
Battery	DC 3.7V (1000mAh lithium battery capacity)
Dimensions	52.9x26x117mm
Weight	102.4 g (including battery)

VISCOMETER

ARW DV-1 [For order 220122909](#)

Brookfield type viscometer

ARW DV-1 digital display rotary viscometer is an intelligent instrument with data collection and processing function by single-chip control. It features quick and easy operation, constant rotation speed and wide working voltage range. It also features highly accurate measurements using computer linear correction over the entire measurement range. Its scan function can automatically search for the appropriate impeller and rotation speed for the sample to be tested. The ARW DV-1 viscometer also has a memory function that can save the operating parameters before the instrument is turned off for easier operation.

Fields of application Viscometer ARW DV 1

This instrument is widely used in viscosity measurement on solvent-based adhesives, emulsions, biochemicals, paints, coatings, cosmetics, printing inks, paper pulp, starch, food, etc.



TECHNICAL SPECIFICATIONS	
Measuring range	10~13,000,000 mpa.s
Impellers	1,2,3,4,5,6,7#
Impeller rotation speed	Speed 0.5 / 1/2 / 2.5 / 4/5/10/20/50/100rpm
Interface	RS232
Automatic switch	Free selection of the correct rotational speed or impeller number
Tolerance	± 2%
Power supply	AC 220V ± 10% 50 Hz ± 10%
Operating conditions	Temperature 5-35 °C (Recommended ambient temperature 20 °C)
Dimensions	95x130x155 mm
Net weight	2 kg (excluding the stand)
Supply kit	Instrument body, pedestal, impeller kit N°1/2/3/4/5/6/7, case and manual (in English)



ULTRASONIC THICKNESS GAUGES



ARW-N For order **220122327**

Professional ultrasonic thickness gauge

Portable digital ultrasonic thickness gauge for measuring the thickness of materials. Ergonomically designed for comfortable positioning in your hands, the ARW-N brings together all the necessary functions to satisfy any need. Equipped with internal data memory and a built-in calibration plate for Probe, it allows fast and precise measurement both on a single point and in continuous mode with the SCAN function.



Supplied complete with 5 MHz probe and delivered in a sturdy carrying case



SONDA 5MHz



SONDA 7MHz



TECHNICAL SPECIFICATIONS	
Measuring range	0.7...200 on steel and depending on the probe used (1.2...200mm with the supplied 5MHz probe)
Ultrasound speed	1000-9999m/sec
Resolution	0,1 mm
Accuracy	0,5% of the measurement + 0,04 mm
Selectable units of measure	mm, inch
Dimensions	150mm x 74mm; H 32mm
Weight	245g
External probe	5 MHz ø 14 mm (lungh. del cavo: 1m) 7 MHz ø 6 mm (lungh. del cavo: 1m) opzionale
Power supply	2x1.5V AA batteries
Data output	RS-232
Internal data storage	For 20 files (100 values for file)
Auto shut-off function	Automatic
Scan function	Scan mode (10 measurements for sec.)



OPTIONAL ACCESSORIES

Code	Description
ARW-04	Software and cable for data transfer to PC
ARW-US02	7MHz probe ø 6 mm for thin thicknesses Measuring range 0.75-80.0 mm (steel reference)
ARW-US03	5 MHz ø14 probe for high temperatures up to 300°C Measuring range 3.0 - 200.0 mm (reference steel)



OPTIONAL ACCESSORIES	
Code	Description
220111045	Multi-value calibration block (1-3-5-10-15-20mm)
221120792	Coupling liquid (1000ml)

ULTRASONIC THICKNESS GAUGES



ARW-1300 For order **22012327**

Ultrasonic Thickness gauge for materials

The ARW-1300 uses ultrasound technology to measure the thickness of a material by simply placing the probe on the surface. This thickness gauge is able of quickly and accurately measuring the thickness of various materials or industrially manufactured parts, as well as monitor piping and pressure vessels of manufacturing equipment and the degree of corrosion of various parts in use. The large HD color display enables clear and precise reading of the measured values, even in low light conditions.

It is widely used in manufacturing, metal processing, commodity inspection, and other inspection areas.

- Menu operation and **large color backlight HD display** for clear and precise readings
- **Two calibration modes** (speed of sound calibration, basic calibration)
- **Wide selection of materials** for a correct calibration of the ultrasound speed in a simple and fast way (selectable list from the menu containing the most common materials, also available the "Custom" function to insert the speed of materials of your production)
- **Data memory** with archiving function (can be viewed directly from the instrument with a color graphic display)
- **Data statistics function** directly on the display (min. max., average values)
- Setting function of the **limit values** (alarm values) with acoustic and visual signaling through the color distinction on the display
- Graphic display of measures
- Auto-off function
- Probe supplied 5MHz (diameter 10mm)



- SUPPLY KIT**
- Instrument body
 - Operative Manual
 - ABS case
 - USB cable for charging
 - Companion gel
 - Ni-MH rechargeable battery
 - 1Probe supplied 5MHz (diameter 10mm)



TECHNICAL SPECIFICATIONS

Measuring range	1.00 ~ 300.0mm
Data archive	1500
Probe selection	√
Operating frequency	5MHz/2.5 MHz
Measurement error	± (0.5% H+0.05)mm
Resolution	0.01mm (1.00 a 99.99) 0.1mm (100 a 300mm)
Lower limit of measurement of tube	∅ 20x3mm (steel)
Speed of sound adjustment range	1000 ~ 9999m/s
Operating temperature range	0 ~ 40 °C
Battery	3 1.2V Ni-MH rechargeable batteries
USB charge	5V 1A
Dimensions	65x146x30mm
Weight	130g
Probe	Measurement parameters
5MHz (10mm diameter)	1.00 ~ 300.0mm (Supplied)
5MHz (6mm diameter)	1.2 ~ 50.0mm (Optional)
2.5MHz	1.2 ~ 300.0mm (Optional)
5MHZ or for high temperatures	1.2 ~ 300.0mm (Optional)



OPTIONAL ACCESSORIES

Code	Description
22011045	Multivalve calibration block (1-3-5-10-15 20mm)
221120792	Coupling liquid (1000 ml)



ULTRASONIC THICKNESS GAUGES



ARW-1930 For order **220122890**

Ultrasonic Thickness gauge for materials

This Digital thickness gauge for materials uses the ultrasonic operating principle to measure the thickness of various types of metals and more, it is able to detect the thickness of metals such as steel, cast iron, aluminum, copper, brass, etc ... and non-metallic such as plastic, glass, ceramic and more. In the case of non-metallic materials, it is advisable to first check the possibility and the measuring range according to your needs after contacting our technical staff. The measuring range depends on the type of material and the probe used, the support starts quickly and easily from one side only without the need for feedback from the opposite side.

- **High quality and precision** with 0.01mm resolution
- Standard probe 5MHz diameter 10mm for measurements from 0.80 to 250mm (on steel base)
- **Integrated probe calibration block**
- Double unit of measure selectable (mm/Inch)
- **Equipped with double 5MHz measurement probe (90° and Straight)**
- Pairing status display icon
- Ultrasound speed measurement function with value adjustment as a function of thickness and material recognition; possibility of self-calibration of the speed according to the thickness
- **Equipped with and interface cable for data transfer and management to PC**
- Auto shut-off function after 3 min. of inactivity



STANDARD DELIVERY

- Instrument body ARW-1930
- ABS hard case
- 5MHz 90° probe
- Straight 5MHz probe
- Coupling Gel Pack
- USB interface cable and software
- User Manual



TECHNICAL SPECIFICATIONS

Measuring range	0.75 - 350 mm (depends on probe used and material being measured)
Ultrasonic speed	1000-9999m/sec
Resolution	0,01 mm
Accuracy	0.5% of measurement + 0.01 mm (by calibrating the specific US velocity of the material)
Selectable units of measure	mm, inch
Dimensions	163mm x 78mm; H 33mm
Weight	200g
Power supply	2x1.5V AA batteries
Data output	USB
Internal data memory	2,000 measurements (divisible into 4 groups A/B/C/D)
Scan function	Scan mode (10 measurements for sec.)



ARW-TOEE For order 220123137

Portable measuring instrument suitable for measuring the thickness of the material with only the support of the probe on one side without the need for any feedback from the opposite side. Equipped with the EE measurement function (Eco Eco Method) for measuring the thickness of a coated material, by enabling this function, the instrument is able to automatically eliminate the thickness of the coating and provide only the thickness of the metal (Thru paint function)

Ultrasonic material thickness gauge: New generation of NT measuring technology with automatic sensor adaptation (V-Path correction for higher accuracy and faster display speed)

Dual measurement modes for detecting material thickness:

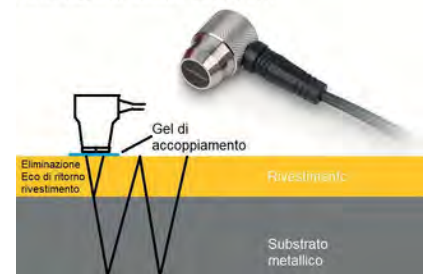
- Pulse-echo mode (up to 600 mm)
- Eco-eco mode (up to 100 mm)



- Equipped with new **NT measurement technology** with automatic sensor adaptation (V-Path correction for higher accuracy and faster display speed)
- **EE (eco-eco) measurement mode:** Enables the detection of the actual material thickness regardless of the presence of a coating, such as an anti-corrosion coating, filler, paint, plastic and other filler material.
- Particularly useful in measuring the thickness of sheet metal, pipes, ducts, also coated, without having to remove the coating. The measured value shown on the display will already be the correct value regardless of the coating thickness
- **Fields of application materials:** metals, plastics, ceramics, composite materials, epoxides, glass and others
- High Accuracy Mode: Switchable reading accuracy from 0.1mm to 0.01mm
- Excellent visualization on the TFT color display (320x240) with adjustable light intensity to allow readability in all environmental conditions
- **Large internal data memory,** 100 groups of data with 100 single values for each group
- Battery powered (2 x AA) with energy saving system, adjustable pause time (Sleep Mode) and settable display shutdown (Standby Mode)
- Equipped with a **USB data output** for data download to PC, optional Plug-in interface software for transferring measurement data from the measuring instrument to a PC, e.g. eg. in MS Excel®
- Multi-point calibration options for materials of different thicknesses
- **Three different measurement modes:** Standard mode (single measurement), Scan mode (for continuous probe dragging measurement and display of the REAL time value, MIN and MAX value of the measurement series) and DIFF mode with calculation of difference between the measured value and a manually set sample thickness
- **Alarm function** for high and low limit values with acoustic and visual signaling of exceeding
- Selectable menu languages: DE, EN, FR, ES, IT
- Date and time can be set with indication on data memory

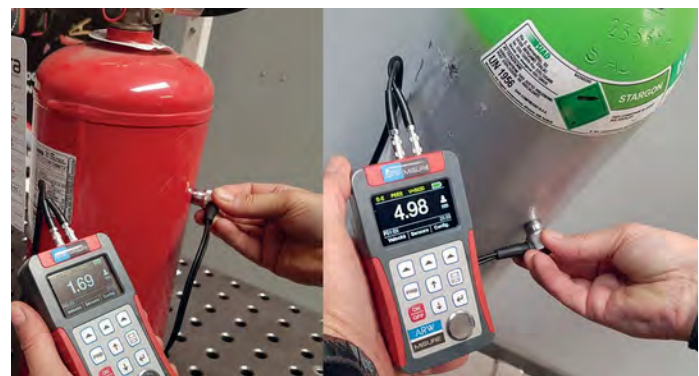


Sonda doppia con funzione EE (Eco-Eco)



TECHNICAL SPECIFICATIONS

Measuring range (steel reference)	"IE" pulse-echo mode: 0.7–600 mm (depending on the material measured) "EE" eco-eco mode: 3–100 mm (min. base material substrate thickness 3mm)
Resolution	0.1mm/0.01mm switchable
Accuracy	0,4 % f. s. ± 0,04 mm
Probe	5 MHz ø 10 mm
Dimensions	LxPxA 70x31x130 mm
Weight	245g
Power supply	Battery operated, standard 2x 1.5 V AA batteries, AUTO-OFF function to conserve batteries
Supply kit	EE/IE US12 measuring probe, USB interface cable, coupling gel, ABS case



PORTABLE ROUGHNESS GAUGE



ARW-BT300 [For order 220122857](#)

ARW-BT300 Roughness Tester, Innovative separable translator group and Mobile APP connection

The ARW-BT300 portable roughness tester is a high-precision instrument for measuring surface roughness. Its innovative construction features allow it to be used in various applications where other instruments fail to satisfy. It can be used on a variety of machining and surfaces, not only flat but also external conical, external cylinder, internal, curves, through holes, grooves and more. Numerous functions, including the large color graphic touch screen display and the innovative Bluetooth interface with APP connection, make it a practical, modern and reliable instrument.

- Mechatronic and ergonomic design, small size, light weight, ease of use
- **Roughness feeler complete with translator unit that can be separated from the body** of the instrument can and be used separately for more flexible measurements in a smaller space. **Or connected directly to the main unit** creating a single instrument body for standard measurements. The hooking and uncoupling operation can be performed quickly and easily
- DSP chip control and data processing, high speed, low power consumption
- **As many as 22 roughness parameters: Ra, Rz, Rq, Rt, Rp, Rv, R3z, R3y, Rz (JIS), Rs, Rsk, Rsm, Rku, Rmr, Ry (JIS), Rmax, R_{PC}, Rk, Rpk, Rvk, Mr1, Mr2**
- High measuring range (320µm)
- 3.5-inch color graphic **TFT touch screen display**, wide viewing angle, excellent readability and equipped with backlighting to improve visibility in dark environments
- Commands accessible via keyboard and Touch screen display
- **Equipped with Bluetooth data interface for connection to APP and portable printer**
- Built-in Li-ion rechargeable battery with control circuit
- **Large data memory**, 100 values and curves (Graph) can be stored



OPTIONAL ACCESSORIES	
Code	Description
220122879	Portable printer

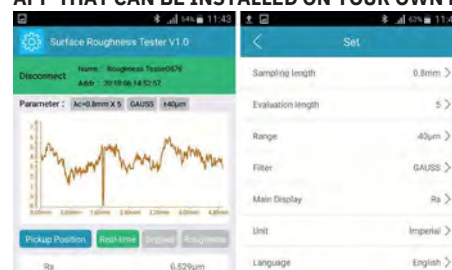
Parameters	Measuring range
Ra,Rq	0.005µm ~ 30µm
Rz,R3z,Ry,Rt,Rp,Rm	0.02µm ~ 320µm
Sk	0 ~ 100%
S, Sm	1mm
tp	0 ~ 100%

TECHNICAL SPECIFICATIONS		
Measuring range	Z axis (vertical)	±160 µm
Measuring range	X axis (transversal movement)	20mm
Specifications	Parameters	Ra,Rz,Rq,Rt,Rp,Rv,R3z,R3y,Rz(JIS),Rs,Rsk,Rsm,Rku,Rmr,Ry(JIS), Rmax, R _{PC} , Rk, Rpk, Rvk, Mr1, Mr2)
Specifications	Standard	ISO,ANSI,DIN,JIS
Specifications	Graphic view	Bearing area curve, roughness profile, primary profile
Filter	RC,PC-RC,Gauss,D-P	
Sampling length (lr)	0.25, 0.8, 2.5mm	
Evaluation length(ln)	Ln=lr×n n=1~5	
Probe	feeler	Diamond, 90° angled cone, 5µmR
Probe	Force	<4mN
Power supply	internal rechargeable Lithium ion battery, Charger:	DC5V,800mA
Dimensions	instrument body: 64x53x160mm	Probe: 23x27x115mm
Weight (instrument body)	About 380g	
Operating conditions	Temperature: - 20°C ~ 40°C	Humidity: < 90% RH
Standard supply	instrument body - Probe with translation unit diamond feeler tip - roughness sample - adapter - power supply for recharging - software - USB cable - small stand - carrying case - user manual	

SOFTWARE INCLUDED IN THE SUPPLY



APP THAT CAN BE INSTALLED ON YOUR OWN DEVICE



COMPACT ROUGHNESS GAUGE



ARW-100 [For order 220122362](#)

Digital portable roughness tester



- Ra Rz, Rq, Rt parameters
- Pocket-sized & affordable
- **Wide measuring range** suitable for most materials
- Measurement of roughness on flat, cylindrical and inclined surfaces
- **Calibration function** with supplied external sample supplied as standard
- Standards compliant with ISO and DIN standards
- Equipped with **rechargeable Li-ion batteries**
- **Backlit display with OLED technology** for a clear view from every angle
- DPS processor with high calculation efficiency



TECHNICAL SPECIFICATIONS	
Roughness parameters	Ra, Rz, Rq, Rt
Tracer stroke	6 mm
Selectable cut-offs	0.25/0.8mm/2.5mm
Measuring range	Ra: 0.05 - 10.0 µm Rz: 0.1 - 50 µm
Accuracy	±15 %
Repeatability	<12%
Feeler	diamond, radius 10±2,5 µm, angle 90° (+5° or 10°)
Operating Humidity	<90% RH
Operating temperature	0 °C±40 °C
Power supply	3.7 V Li-Ion rechargeable battery
Charging time	3 hours
Dimensions	110x70x24mm
Weight	200 g

- SUPPLY KIT**
- Instrument
 - Tracer cover system
 - Roughness sample

- Battery charger
- Instruction manual
- ABS case

BARCOL DUROMETER

ARW 934-1 [For order 220122361](#)

Barcol hardness tester is a hardness tester based on simple, fast and almost non-destructive operation. The test is obtained by measuring the penetration resistance of a steel needle pushed by a spring with a preload, the sample is placed under the needle of the instrument and a uniform pressure is applied to the sample until the indicator reaches a value. The depth of penetration is converted into the Barcol hardness value on a scale from 0 to 100. Compliant with ASTM B648 standards
Application: The Barcol hardness tester is mainly used to check the hardness of aluminum alloys, it also finds its place to measure the hardness of plastic products, glass fiber and coatings, such as paint, etc.



TECHNICAL SPECIFICATIONS	
Penetrator	26° truncated cone Diameter 0.176mm
Range	0-100HBa equivalent to 25-150HB
Resolution	0.5HBa
Precision	hardness range 42-52HBa ±2HBa hardness range 84-88HBa ±1HBa
Repeatability	hardness range 42-52HBa ±2HBa hardness range 84-88HBa ±1HBa
Weight	0.5kg

- Small, compact and easy to use
- Wide measurement range, from 25 to 150HB
- High sensitivity, Thanks to the graduated scale from 0 to 100, it offers greater sensitivity than the Webster method (0-20 scale).
- It does not require any support, it can be positioned directly on the piece to be tested

- SUPPLY KIT**
- Instrument, spare indenters (2pcs), calibration blocks (2pcs), calibration key, support foot, carrying case



DUROMETER FOR METALS



ARW-220 For order **220122727**

Impact hardness tester for metals

Compact and easy to use portable digital hardness tester, particularly suitable for measuring hardness on solid surfaces, even large ones, which are difficult to access with other instruments. It uses the rebound measurement method (Leeb test) with an impact tester (probe) able of detecting the hardness on various types of material and converting the value into the main measurement scales (Rockwell B, Rockwell C, Brinell, Vickers).



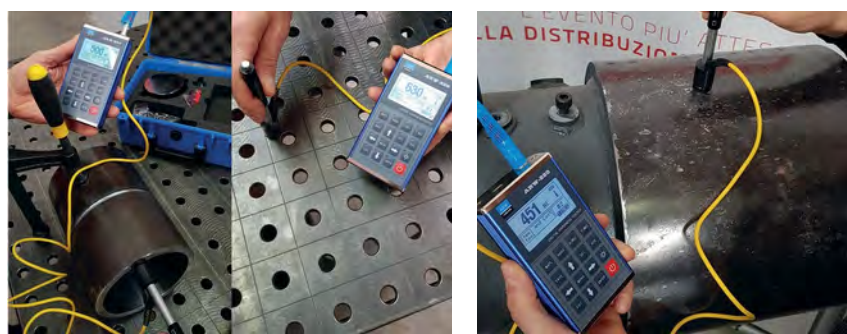
- **Calibration block included in the supply**
- Rebound measurement system (Leeb Test), **Standard "D" type impact probe included**
- Selectable measurement scales: Rockwell (B & C), Vickers (HV), Brinell (HB), Shore (HSD) Leeb (HL)
- **Strong metal** external structure
- Large **backlit LCD screen** (128x64), with all functions and parameters
- Internal menu in "English"
- **Internal data memory for 500 measurement groups, with 32 single values for each group**
- **Mini statistics function:** indicates the measured value, average value, direction of measurement, date and time
- **Data interface, cable and software included in delivery**
- Limit value function: A visual and acoustic signal helps the measurement
- Automatic recognition of the type of sensor used
- Ability to measure in any direction, vertical, diagonal, horizontal and upside down
- Auto power off for energy saving

TECHNICAL SPECIFICATIONS

Measurement range	170 to 960 HLD (Standard "D" type probe)
Measurement direction	all directions possible, 360° ◀▶▶▶▶▶
Resolution	1 HL, 1 HV, 1 HB, 0.1 HRC, 0.1HRB, 1 HSD
Accuracy	1 % with 800 HLD
Minimum bending radius of the test object	50mm (concave/convex) using the adapter ring
Minimum thickness of the tested sample	30mm (type "D" probe) lower in case of use low impact "C" type impact tool
Data memory	For 500 measuring groups, with 32 individual values for each group, from which the average value is calculated
Display	Backlit LCD (128x34mm)
Conditions of use	Ambient temperature -10°C/40°C, Humidity ≤90%
Power supply	1.5V AA batteries (autonomy approx. 100h without backlight)
Dimensions	132x82x31mm
Weight	600g. (probe excluded)



Calibration block included in the supply



MEASUREMENT FIELDS

Materials	Stairs	MIN	MAX
Steel and steel alloys	HRC	19,8	68,5
	HRB	59,6	99,6
	HSD	26,4	99,5
	HB	140,0	651,0
Cutting tools	HV	83,0	976,0
	HRC	19,8	68,5
	HV	83,0	976,0
	HRBH	59,6	99,6
Stainless steel	RC	19,8	68,5
	HB	140,0	651,0
	HV	83,0	976,0
Cast iron	HB	140,0	334,0
Ductile iron	HB	140,0	387,0
Aluminum alloys	HB	30,0	159,0
	HB	40,0	173,0
Brass (copper and zinc alloys)	HRB	13,5	95,3
Bronze (alloys of copper, aluminum, tin)	HB	60,0	290,0
Copper alloys	HB	45,0	315,0

OPTIONAL ACCESSORIES

Support rings for spherical, concave, convex surfaces



SUPPLY KIT

- Body Instrument
- Standard "D" type impact probe
- Standard calibration block
- Probe cleaning brush
- User manual
- ABS case
- Software and interface cable



ARW-1000 For order **220123171**

Impact hardness tester for metals

The ARW-1000 digital hardness tester is a compact and handy instrument able to quickly and accurately measure the hardness of any metallic material. It uses the rebound measurement method (Leeb test) and combined with the impact probe it has the possibility of detecting the hardness on numerous types of material and converting them on the main hardness scales (HRB, HRC, HV, HB, HS, HL).

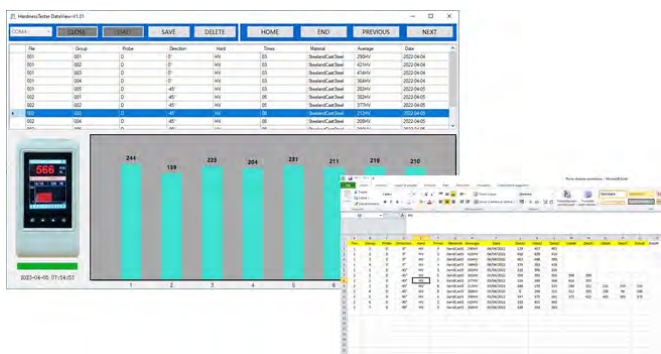
The instrument features a compact structure, portable and easy to operate, equipped with a large 2.8" 320*240 pixel TFT color display with rich information, simple and complete setting and configuration menu, large memory function (max 510 files)



- Rebound measurement method (Leeb Test) and **standard "D" type impact probe included.**
- Equipped with a large **2.8" color TFT display, 320*240 pixels** with numerous functions and parameters.
- Simple and complete setup and configuration menu.
- **Direct display of hardness scales HRB, HRC, HV, HB, HS, HL.**
- **Large memory** with 510 files, 47-341 groups of data depending on the setting of the number of beats for the average value calculation (selectable setting from 1 to 32 beats).

The higher the data value set for the calculation of the average value, the more the number of data SETs saved in the File will be reduced. Saved data: single measurement value, average value, measurement date, impact direction, times, material, hardness system and other information.

- It can be equipped with **7 different impact devices** for different applications (optional). It does not need to be recalibrated during replacement, and the type of probe can be identified automatically.
- The instrument is built with large capacity **Li-ion rechargeable battery** and charge control circuit which enables it to work for a very long time.
- Equipped with **pre-settable alarms**, the upper and lower limits of the hardness value can be set with immediate indication and the automatic alarm will sound when the set hardness value is exceeded.
- **Software program for data transfer to PC with Excell file creation**



STANDARD CALIBRATION BLOCK:
The ARW-1000 hardness tester is supplied complete with a sample block for checking and calibrating the instrument

ARW-1000 HARDNESS TESTER SOFTWARE PROGRAM (included)

TECHNICAL SPECIFICATIONS

Hardness scale	HL, HRC, HRB, HRA, HV, HB, HS
Memory	510 file, 47 ~ 341 groups (Impact times: 32 ~ 1) per file
Measuring range	HLD(170 ~ 960), HRA(59 ~ 85), HRB(13 ~ 100), HRC(20 ~ 68), HB(19 ~ 651), HV(80 ~ 967), HS(30 ~ 100)
Tensile strength U.T.S. range	374 ~ 2652 MPa
Accuracy	±6HLD (760±30HLD) error of displayed value 6HLD (760±30HLD) repeatability of displayed value
Standard Impact Device	D
Data Interface	USB 2.0, Bluetooth
Optional Impact Devices	DC / D+15 / G / C / DL
Max. Workpiece Hardness	996HV(For Impact Devices D / DC / DL / D+15 / C) 646HB(For Impact Device G)
Min. Radius of Workpiece (convex/concave)	Rmin = 50mm (with special support ring Rmin = 10mm)
Min. Workpiece weight	2 ~ 5kg on stable support 0.05 ~ 2kg with compact coupling
Min. Workpiece thickness	5mm (Impact Devices D/DC/DL/D+15) 1mm (Impact Device C) 10mm (Impact Device G)
Min. thickness of hardened layers	0.8mm
Power	Rechargeable Li Battery, 3.7V, Li(2000mAh)
Continuous Working time	About 30h
Charging time	4 ~ 5 hours
Operating temperature	0 ~ 40°C
Humidity	≤ 90%
Overall dimensions	212 × 80 × 35 mm
Weight	320g

STANDARD DELIVERY

- Main unit
- Impact Device type D
- Charger
- Brush
- Connecting cable
- Instruction manual
- Dataview Software



DUROMETER FOR METALS



ARW-H01K For order **220122893**
ARW-H02K For order **220122694**

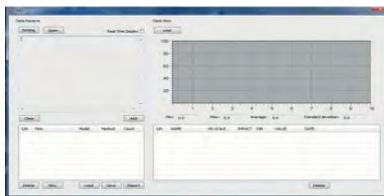
ARW-H05K For order **220122892**
ARW-H010K For order **220122810**

ARWHO Portable digital ultrasonic hardness tester

This portable hardness tester exploits the ultrasonic measurement method (UCI) able to take metal hardness measurements in the various measurement scales (Rockwell, Brinell and Vickers) with extreme precision even in particular conditions where other instruments encounter difficulties, such as example on small pieces and thin thicknesses below 1 mm.



- **Extremely simple to use**, this ultrasonic hardness testing instrument is ideal for mobile hardness testing thanks to its compact size with fast and accurate results
- The ARWHO hardness tester carries out a measurement using a diamond tip according to the Vickers method, which is pressed onto the test piece by applying a predefined force. The measurement method is the conversion into high-frequency ultrasound vibrations.
- **Applications:** the ultrasonic hardness measurement method is ideal for tests on small pieces such as weld points, molded pieces, ball bearings and toothed wheel flanks where the measurement surface is very small, thin thicknesses and surfaces that have undergone surface hardening treatments.
- **Advantages:** this technology offers considerable advantages compared to the most used traditional methods. Compared to the Rockwell and Brinell method a lower load is applied and consequently the impression will be almost invisible making the test completely non-destructive, compared to the Vickers method we do not need to carry out the optical measurement with considerable time savings. If we compare it to the method most commonly used in portable hardness testers (leeb test also called rebound hardness tester), we are not limited by weight and size, but measurements can also be taken on small surfaces, small objects and thin thicknesses.
- Normative standards: the appliance complies with the following technical standards: DIN 50159-1 2008; ASTMA1038-2005; JB/T9377-2013
- **Statistics function:** Display of the measurement result, number of measurements, maximum and minimum value as well as mean value and standard deviation
- Equipped with **data memory** able of archiving up to 1000 groups of measured values, each consisting of 20 individual values
- Calibration function both on standard hardness specimens and on customized reference samples
- Software for data transfer and management



software



penetrator

- Delivery kit:**
- Instrument,
 - UCI measurement probe
 - Interface cable
 - Data management software
 - Transport case
 - User manual



TECHNICAL SPECIFICATIONS

Measurement load	HO 1K (10N) HO 2K (20N) HO 5K (50N) HO 10K (100N)
Measurement range	HRC: 20.3 - 68; HRB: 41 - 100; HRA: 61-85.6; HV: 80 - 1599; HB: 76 - 618; Tensile strength: 255 - 2180 N/mm ²
Accuracy	± 3 HV; ± 1,5 HR; ± 3 % HB
Measurement time	2 sec
Display unit	HRC, HV, HBS, HBW, HK, HRA, HRD, HR15N, HR30N, HR45N, HS, HRF, HR15T, HR30T, HR45T, HRB.
Battery operated internal, standard, autonomy	up to 12 hours without
Minimum weight of the test object	300g. for direct measurement with the sensor (included); 100g. with support ring (optional)
Minimum test object thickness	1 mm
Minimum recommended measuring surface	ca. 5x5 mm
Dimensions	LxPxA 160x83x28 mm
Admissible ambient temperature	-10 °C/40 °C
Net weight	ca. 0,7 kg



ARW HBA [For order 220121721](#)

ARW HBC [For order 220121760](#)

ARW HBD [For order 220121722](#)

- Shore A, C, D hardness measurement
- Accuracy 1% of the measured value
- Peak Hold function (max. value identification hand)
- Reference standards: DIN 53505 - ASTM D2240 - ISO 868

Analog shore hardness tester

Measurement Mode:

Position the max pointer indicator hand to zero (Red Pointer), then grip the instrument in the lower base, resting it on the piece to be tested and exerting a slight pressure so that the support base does not adhere completely to the surface of the object, at this point it is possible to read the instantaneous value on the main pointer and the value of max peak on the red hand.



Supplied complete with wooden case and test specimen.



STAND FOR BENCH TESTS

Version for SHORE A/O

[For order 220121792](#)

Version for SHORE D

[For order 220121854](#)

TECHNICAL SPECIFICATIONS

Measuring range	Mod. HBA 0...100 Shore A with resolution 1.0 Mod. HBC 0...100 Shore C/O with resolution 1.0 Mod. HBD 0...100 Shore D with resolution 1.0
Accuracy	1% of the measured value
Dimensions	L 115xB60xH25 mm
Weight	160 g

Typical applications of the different measurement scales:

- **Shore A:** rubber, elastomers, neoprene, silicone, vinyl, soft plastics, felt, leather and similar materials.
- **Shore C/O:** soft materials such as foam rubber, sponge, etc.
- **Shore D:** plastic, formica, epoxy resins, plexiglass, etc



ARW-HD

Durometer for rubber and plastic

The ARW-HD Digital Shore hardness tester is a compact, lightweight and practical to use portable instrument. Available in three different solutions, Shore A, 0 and D for measuring various types of plastic and rubber material with indenter system. Equipped with a large backlight display and the possibility of PC data interfaces (optional accessory) for data management.

ARW - HDA - Durometro Shore A [For order 220122485](#)

ARW - HD0 - Durometro Shore C/O [For order 220122516](#)

ARW - HDD - Durometro Shore D [For order 220122482](#)

- **Internal memory** for up to 500 values
- Detection of the maximum **peak value**
- Calculation of the **average value** on a preset number of readings from 1 to 9
- **Three measurement scales** available: Shore A, Shore C/O, Shore D
- Data interface (optional accessory) for connection to PC for data saving, printing and analysis through software and an RS232C interface cable.
- It is equipped with a **special circuit with LSI microprocessor** and crystalline oscillator which guarantees high measurement accuracy.
- The instrument meets the requirements of the standards: DIN 53505, ISO 868, ISO 7619, ASTM D 2240, JIS K7215.
- **Auto power off** function ensures energy saving.

OPTIONAL ACCESSORIES		
Code	Description	Price
221121449	Software and cable for data transfer to PC Cod. ARW-01	



TECHNICAL SPECIFICATIONS

Display	LCD
Shell	impact resistant ABS plastic material
Measuring range	0~100 Shore
Resolution	0.1 Shore
Accuracy	±1% o ±5 digit
Measurement speed	>30 (reads for minute)
Working temperatures	0°C~50°C
Power supply	batteries 2x1,5v AAA(UM-4)
Dimensions	176x63x25 mm
Weight	310 g
Standard accessories	* Instrument * Calibration block * carrying case * Instruction manual for use

VIBROMETER, ACCELEROMETER



ARW-630B For order **220123116**

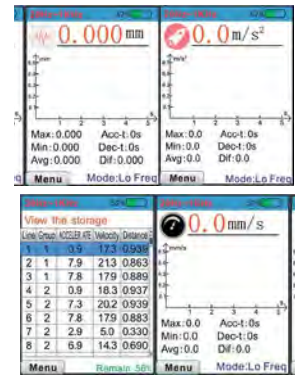
Vibration Meter, Accelerometer

The ARW-630B vibration meter is based on the piezoelectric effect which converts the vibration signal into an electrical signal, then, by analyzing the input signal, the displacement, speed and acceleration values are detected. Equipped with graphic display and data memory with direct visualization on the display. The ARW-630B is suitable for vibration measurement of mechanical equipment, especially for rotary and reciprocating machines. It is widely used in machinery manufacturing, electrometallurgy, engineering and aerospace.



- **Large backlit color display** with simultaneous display of the three parameters
- Measurement of acceleration, speed and displacement, **with graphic display** in the three different modes
- Surveys according to ISO 10816-1 standard with selection of the 4 reference classes
- **Internal memory** for filing and saving data in 7 groups of measurements (visible only on the instrument)
- Equipped with a **front LED** to illuminate the measurement area in case of poor lighting
- **Display adaptation mode according** to measurement orientation
- **Double measurement button** to facilitate measurement in vertical position
- **Battery charge level indicator on display**
- Selection of **high and low frequency measurement range**: High frequency (1KHz,...10KHz)/ low frequency (20Hz-1KHz).
- **Complies with ISO 10816-1** which establishes the general conditions and procedures for vibration measurement and evaluation. The general evaluation criteria have been provided mainly to ensure reliable, safe and long-term operation of the machine, minimizing the negative effects on the associated equipment (Setting of the 4 reference classes from the menu)

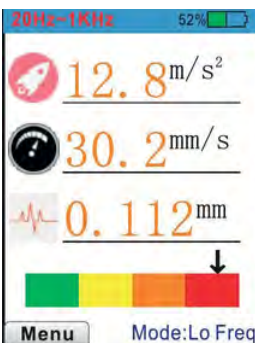
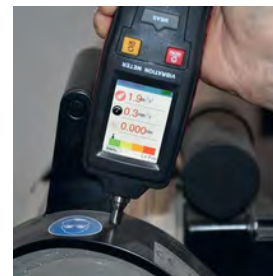
Display adaptation mode according to measurement orientation



TECHNICAL SPECIFICATIONS	
Technical parameters	Technical indicators
Sensor	Piezoelectric ceramic accelerometer sensor (shear type)
Measuring range	
Acceleration	0.1~199.9 m/s ²
Speed	0.1~199.9 m/s
Displacement	0.1~199.9 mm
Precision	
Vibration shifts	0.01-0.02 mm ≤±10%≥2.0 mm ≤±5%
Vibration speed	0~2.0mm/s, ≤±10%≥2.0mm/s, ≤±5%
Vibration acceleration	0~2.0 m/s ² ≤±10%≥2.0 mm ≤±5%
Frequency range	
Acceleration	High Frequency: 1KHZ~4KHz (HI) Low Frequency: 10HZ~1KHz (LO)
Speed	20Hz~1KHz (LO)
Displacement	20Hz~1KHz (LO)
Display LCD	Color display
Data display interval	2 seconds (1 second in single parameter measurement)
Maximum group number for data storage	5 groups (Files G1 - G5)
Power supply	1.5V AAA battery*2
Operating temperature	0~40 °C
Operating humidity	30~90% RH
Dimensions	180x54x30 mm
Weight	250 g (with batteries)

APPLICATIONS:

- Electromechanical sector: plant control and maintenance to identify any defects and anomalies of machines, engines and plants
- Iron and steel: all kinds of rotating equipment in steel and rolling mills
- Electrometallurgical
- Aerospace industry



Vibration intensity (ISO 10816-1)					
	Machinery	Class I small machine	Class II medium machine	Class III large hard base	Class IV large soft base
Vibration speed Vrms	mm/s				
	0.28				
	0.45				
	0.71		Good		
	1.12				
	1.80				
	2.80		Satisfactory		
	4.50				
	7.10		Unsatisfactory		
	11.20				
	18.00				
	28.00				
	45.90		Unacceptable		



ARW-8803 AL For order [220121860](#)

Wireless video endoscope for inspections

ARW 8803 video endoscope allows for quick inspections in areas that are normally difficult to access. The waterproof mini camera with 1 meter long swivel cable offers flexibility of use and convenient access to the areas to be inspected. The TFT-LCD Wireless monitor can be separated from the apparatus to guarantee good visibility of the images even in situations where it is necessary to orientate or use the camera in narrow spaces. Accessories included: magnet, 90° deflection mirror, Hook and cap to be applied to the end of the camera.



- 1 m jointed cable. Ø9mm
- "Monitor" lithium rechargeable batteries
- Adjustable LED lighting

TECHNICAL SPECIFICATIONS	
Camera Specifications	
Sensor	CMOS
Pixel	704 x 576 (PAL)
Viewing angle	50°
Frequency	2468 Mhz
Band	25 Mhz
Modulation	FM type
Power supply	4 x AA
Dimensions	186 x Ø14.5 x 41mm. cable excluded
Weight	530g
Specifications Monitors	
Type	color 3.5" TFT-LCD
Pixels	640 x 480 3.5" TFT-LCD
Video system	PAL
Frequency	2468 Mhz
Consumption	max 450 mAh
Power supply	1 x Lithium rechargeable battery
Dimensions	100 x 70 x 30 mm.
Weight	140g
System Specifications	
Temperature of use	-10 to +50°C
Humidity	15 to 85% RH



accessories included in the kit



Ø 9mm with 3.5" monitor and photo/video recording

- Mini camera Ø 9mm with 1mt of flexible tube
- Night vision with illumination up to 1.5m
- Camera protection level, Waterproof IP67
- 3.5" TFT-LCD color monitor with wireless connection for remote viewing (equipped with rechargeable lithium batteries)
- Lightweight structure and ergonomic handle for greater flexibility of use
- **Image and video recording, equipped with mini SD card slot (not supplied) for saving data (Max. SD card: 16GB)**



VIDEOINSPECTION



ARW-703 PLUS For order **220122252**

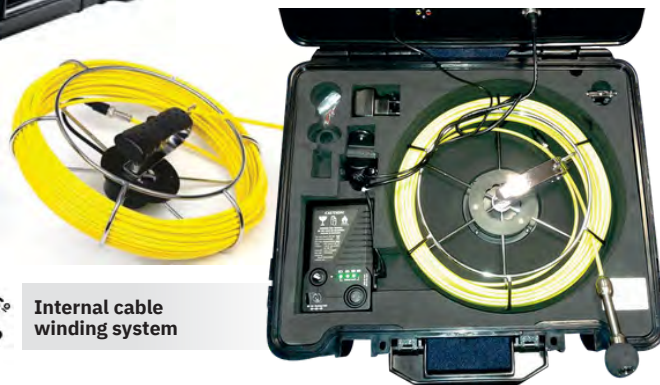


SD Recording



- 1/3 inch Sony CCD camera, **135°** (wide viewing angle)
- Camera in **stainless steel** with high resistance and small dimensions, **IP 68** water proof level
- Front transparent sapphire glass, 12 white LEDs
- Camera diameter: 23mm
- 30mt of fiberglass cable with steel reel
- Swivel cord reel on housing housing
- "One touch" button for video recording,
- **7" TFT LCD** monitor with DVR
- Rechargeable accumulator with high autonomy Li-battery (6600mA) for 8 hours of continuous use
- Sturdy waterproof ABS case

Version with meter counter function available on request



Internal cable winding system



CAMERA TECHNICAL SPECIFICATIONS	
Sensor	1/3" Sony CCD
Dimensions	23mm(dia.)x45mm(length)
Material	304# stainless steel
Visual angle	135° wide angle
Protective lens	Transparent sapphire crystal
Lighting	12 high brightness LEDs
Water Proof	IP68
LCD Display and DVR	
LCD Resolution	800*480 pixels
Video Compress	MPEG-4
Registration	Video and audio recording
Picture	Picture shot function

PUSH CABLE TECHNICAL SPECIFICATIONS	
Material	Glass fiber
Winder	Stainless steel
Cable length	30mt.
Connector	Golden contact points
Wrapping	Rotating cord reel
Wheel diameter	33cm
Cable diameter	5.4mm
LCD Display and DVR	
LCD Dimensions	7 inch
Language	9 selectable languages
Control Panel	Front setting keys
External memory	SD Card (Max. 32GB)



IP68 WATERPROOF

Waterproof stainless steel camera housing with flexible spring to easily go through the pipes.

Camera head with highly flexible spring makes it capable of passing through 4"90 bends in a 2" pipe.



Opzionale

Built in 512Hz Sonde

Camera localization and tracking system (optional on request) consisting of:
 - Camera with 512Hz frequency transmission
 - Search services

VIDEOENDOSCOPE



ARW-5500 For order **220122797**

Pocket video endoscope

This is a true pocket video endoscope camera, its compact design allows 1 meter of camera cable to be wound directly inside the instrument body.

Thanks to the high resolution 5.9mm diameter camera combined with a one meter semi-flexible cable, it is suitable for various applications in the civil and industrial fields. All functions are managed through a setting menu and a keyboard with 7 practical and intuitive function keys.



- Pocket sized video endoscope with **fully retractable** camera cable in the back of the product
- High Resolution HD 720P
- **5.5mm semi-flexible** camera cable
- "Flip display" function to rotate the image display
- **Lighting** with 6 white LEDs with 4-level intensity adjustment
- Display of date and time
- 1.5X and 2X image magnification key
- Large 3" LCD display
- **MicroSd card slot** for capturing images and recording videos (Max.32 GB)
- **Practical torch** positioned on the back and activated from the keyboard.
- Rugged construction with impact protection
- Delivery includes **very useful adapters** - Hook, side view mirror and magnet



TECHNICAL SPECIFICATIONS

Display	3-inch diagonal color TFT LCD
Monitor controls	180° rotation, 1.5X to 2X zoom, brightness +/-
Camera head diameter	5.5 mm
Resolution	720 HD
Camera field of view	55°
Shallow depth of field camera	30cm (approx)

Focal distance	3 cm (approx)
Camera light source	6 white LEDs with adjustable brightness
Probe length and type	1 mt. Semi-flexible
Degree of camera protection	IP67
Power supply	(duration approx. 3 hours), not included
Operating temperature / humidity	32° to 113°F (0° to 45°C) @ 5 to 95% RH
Dimension	139 x 83 x 30 mm
Input	Slot MicroSD card (max.32GB)

TACHOMETER

ARW AT-8 For order **220121480**

Optical Mechanical digital tachometer

Optical/mechanical version, through the simple connection in the upper end of the interlocking detail equipped with push rod and wheel, the speedometer is transformed from optical to mechanical. Equipped with a laser pointer to facilitate the centering of the object to be measured (in optical reading).

- Large double-line backlit LCD display
- Equipped with tip for measuring g/min "RPM"
- Wheel for linear measurements "m/min" (in mechanical reading)
- Sampling time 0.5 sec. (over 120RPM)
- Time base: Quartz crystal
- Low battery indication
- Battery: 9V.
- Absorption: Approx 45mA
- 40 reading memories

Supplied complete with ABS case, reflective adhesive strips, wheel, contact adapters, batteries and user manual.



TECHNICAL SPECIFICATIONS

Display	5 digits LCD display
Accuracy	±(0.05%+1 digits)
Range (Contact)	2 - 20,000RPM
Range (optical)	2 - 99,999RPM
Range (Total count)	1 - 99,999
Resolution	0.1 RPM (2 - 9999.9 RPM). 1 RPM. (over 10000 RPM)
Operating distance	50mm - 500 mm
Operating temperature	0° - 50°(32 - 122° F)

LASER DISTANCE METER



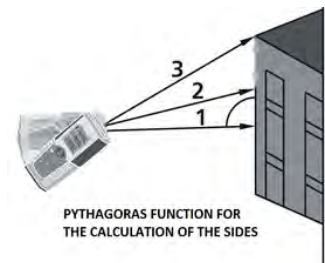
ARW 100 H [For order 220121772](#)

ARW-100H is a laser distance measurer designed to satisfy any kind of high precision professional use. Thanks to its innovative technology, distance and size estimation can be detected by a single operator. In addition, the ARW-100H is equipped with calculation functions for measuring areas and volumes with the built-in Pythagoras function. Thanks to the latest generation sensors with which it is equipped, it is also possible to measure horizontal or vertical measurements that are somehow "obstructed" by an object.



TECHNICAL SPECIFICATIONS	
Range	0.05 to 100 mt
Measurement accuracy	± 1.5 mm
Unit of measure	mt, in, ft
Laser	Class II
Type of laser	635nm, <1mW
Auto Bias™ technology	Yes
Simple Pythagoras functions	Yes
Addition and subtraction	Yes
Max and min distance	Yes
Measurement on 3 axes	Yes
Automatic horizontal distance	Yes

Multifunction illuminated display	Yes
Buzzer	Yes
Degree of protection	IP54
Storage	last 20 measurements
Operating temperature	-10°C to +50°C
Keyboard	Super Soft Touch
Battery life	over 4,000 measurements
Power supply	2 1.5V AAA batteries
Laser auto-off	after 30 seconds
Auto power off of the instrument	after 3 min. of inactivity
Dimensions	H 110 x L 48 x P 28 mm
Weight with batteries	150 g.



GAUSSMETER

ARW 3-2 [For order 220122563](#)

AC/DC static magnetic field meter

This Gaussmeter is used for measuring wide-range magnetic fields, for industrial, mechanical, electrical, materials and laboratory applications

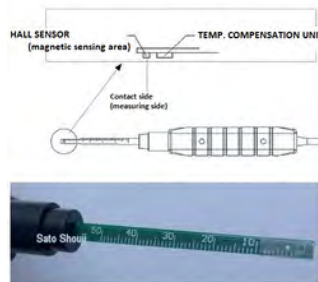


- Units of measurement: G (Gauss), mT (millitesla)
- Measurement of magnetic fields in **DC and AC**
- Range in DC: 300.00mT/3000.0mT
- Range in AC: 150.00mT/1500.0mT
- Resolution: 0.01/0.1mT, 0.1/1G
- **N pole/S pole** indicator
- Use of Hall sensor with automatic temperature compensation
- Zero button for DC magnetic function
- **Separate probe**, easy to use and convenient for remote measurements
- Data hold function to fix the desired value on the display
- Stores maximum and minimum readings with memory recall
- RS232/USB port for computer
- Microprocessor circuit ensures highest possible accuracy and offers special functions and features
- Rugged, compact housing with hard case, designed for easy use and transportation
- Possibility of automatic shutdown to save battery
- Battery power supply (6 1.5V "AAA" type batteries) or with 9V D power supply
- Supplied with magnetic probe, hard case and user manual



Fields of application:

- Magnetic field measurement of a permanent magnet
- Magnetic residual measurement of mechanical parts being processed
- Measurement on DC magnetic field sources
- Measures acoustic speaker magnetic fields
- Magnetic field measurement of DC motors
- Measurement of magnetic dispersion, magnetic shielding



TECHNICAL SPECIFICATIONS	
Display	LCD: 52mm x 38mm dual function
Circuit	LSI microprocessor
Measurement	mT: milli Tesla / G: Gauss
DC measurement range	mT Range1: 300.00mTx0.01mt Range2: 3,000.0mTx0.01mt
	G Range1: 3,000.0Gx0.1G Range2: 30,000Gx1G
AC measurement range	mT Range1: 150.00mTx0.01mt Range2: 1,500.0mTx0.01mt
	G Range1: 1,500.0Gx0.1G Range2: 15,000Gx1G
Accuracy	DC: ±(5%rdg + 10 digits) AC: ±(5%rdg + 20 digits)
Response rate	AC measurement: 50/60Hz
Data output	RS-232 / USB
Data hold	Yes
Sensor	hall
Dimensions	Instrument: 200 x 68 x 30mm probe: 198 x 25 x 19 m
Weight	270 g

OPTIONAL ACCESSORIES

Code	Description
221121004	ARW-801 software for "Real Time" data acquisition complete with USB interface cable

RADIOACTIVITY DETECTOR



ARW - 9501 For order 220122233

This radiation detector comes from the latest development and design research. Light, robust and small in size, it offers remarkable performance in the measurement of Alpha "A", Beta "β", Gamma "γ" and "X-ray" radiations.

Equipped with a large LCD display, it allows the measurement and recording of data with transfer to a PC via a Bluetooth connection and a management software supplied.

APPLICATIONS

This nuclear radiation detector can be widely used in pharmaceutical plants, laboratories, power plants, quarries, metal processing plants, oil fields and pipelines, landfills, etc. In environmental protection, in nuclear radiation pollution, in the control of soil, water, building materials, stones and in the medical field for X-ray control.

- Large LCD display
- Compact, light and particularly robust structure
- Detection of Alpha "A", Beta "β", Gamma "γ" and "X-ray" radiation
- High precision sensor
- Internal data memory
- Bluetooth connection and data processing software



Delivery kits:
Instrument, software interface, case and user manual.

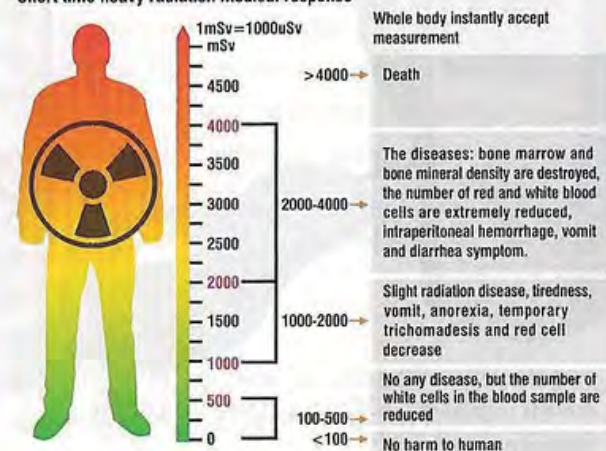


Rotating selector for Alpha "A", Beta "β", Gamma "γ" and "X-ray" radiation detection

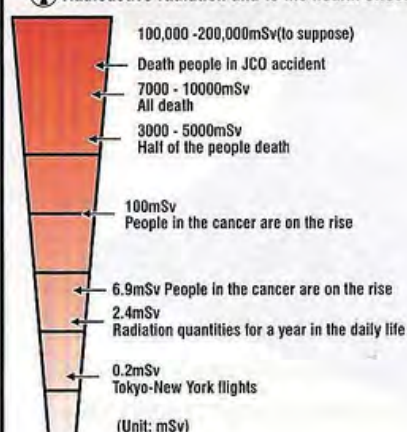
TECHNICAL SPECIFICATIONS

Measurement scales	Alpha "A", Beta "β", Gamma "γ" and "X-ray" radiation Radiation dose: 0.01μSv/h-1200μSv/h Pulse Measurement :0-30000cpm ,0-5000cps
Measuring range	Radiation dose Val. accumulated: 0.001μSv-9999Sv Pulse measurement val. accumulated: 0-9999
Sensitivity	0-999999: 1μSv/h of Co-60, 108 pulses or 1000cpm/mR/hr
Sensor	Halogen filled detector
Data output	Bluetooth
Display	LCD with graphic bar indication
Alarm	freely set the alarm value, default is set to 5μ Sv/hr
Accuracy	Typical 15% (source of Co-60-ray): <10% (<500μSv/h) <20% (>500 u Sv/h)
Data memory	It can store 1000 data, manually or automatically
Operating temperature	0°C ÷ 50°C (-40°C ÷ +75°C during measurement)
Dimensions	200x70x45mm
Weight	206 gr

Short time heavy radiation medical response



Radioactive radiation and to the health effects

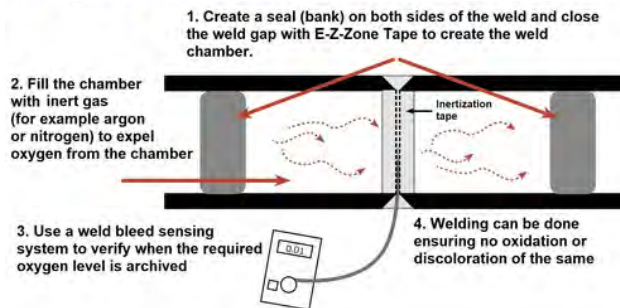


ARW-100SC For order 118000000

The entry level analyzer for welders

Welding with inert gas requires the exclusion of oxygen from the work area during the welding process. ARW-100SC was specifically designed to indicate oxygen concentration down to 0.01%. Within this range it is absolutely safe to weld and produce an oxygen-free weld bead (exceptions include special metals such as titanium, zirconium, etc.). ARW-100SC oxygen analyzer can be used for constant analysis during the welding process or for take samples. Routine quality control inspections are greatly simplified with this tool capable of working with all purging systems and argon welding systems.

- **Self-calibrating**
- **Minimum waiting time.** The device communicates exactly when the residual oxygen concentration of a purging gas is low enough to start welding. No more relying on rough estimates. It will be possible to save time and gas.
- **Reduced consumption of purging gas.** Precisely controls residual oxygen, avoids consuming unnecessary purging gas and produces an oxygen-free weld rod
- Guaranteed high quality, as too premature and therefore porous weld, or colored or even charred weld beads can be avoided
- Duplex / stainless steel. The ARW-100SC oxygen analyzer can be used for all types of stainless steel, duplex and to apply welding on some types of titanium
- Supplied complete with 1mt. of hose with flow adapter, stainless steel probe, vacuum hand pump, user manual and case.



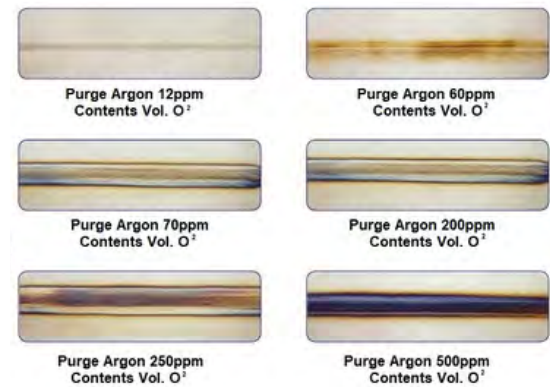
TECHNICAL SPECIFICATIONS

Measuring range	0.01% - 20.9% Oxygen (O2) (100ppm – 209000ppm)
Accuracy	at 20% ± 0,2% at 2% ± 0,02%
Dimensions	155 x 81 x 38mm
Source of illumination	battery type PP3 9V
Display	LCD display (liquid crystal display)
Weight	210g

Welding inerting process

WHY PURGE?

When welding stainless steel, titanium and other corrosion resistant materials, ensuring the ideal environment is essential to maintain the corrosion resistance properties intact. During the welding process, the rod is subjected to heat and air which causes oxidation if the correct procedures are not followed. You need to prevent oxidation for best results. The quality of the weld of the corrosion resistant exotic material depends on the purge method used to reduce or eliminate oxidation.



ARW- G5 For order 220010262

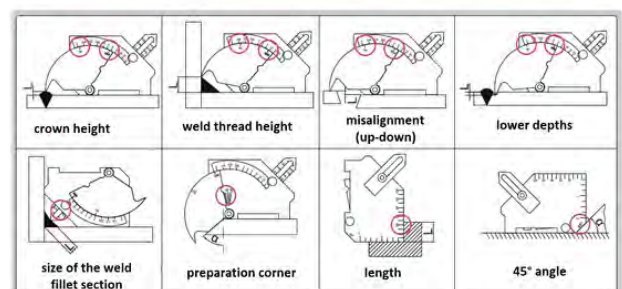
Universal welding caliber

In the quality control of the welds, gauges are also used that are able to provide dimensional evaluations in the finishing and preparation of the surface before welding and after welding.

ARW - G5 Universal gauge for welding control, preparation angle 0°/60°, misalignment, weld thread height, off-axis, preparation angle, excess metal, weld throat, depth measurements of surfaces and slots.

TECHNICAL SPECIFICATIONS			
	Field	Graduation	Accuracy
Crown height	0-25mm	1mm	± 0.5mm
Height of the fillet weld	0-25mm	1mm	± 0.5mm
Misalignment	0-25mm	1mm	± 0.5mm
Weld fillet section size	0-25mm	1mm	± 0.5mm
Preparation corner	0°-60°mm	5°	± 1°
Length	0°-60°mm	1mm	± 0.5mm
45° angle	-	-	± 1°

Universal welding gauge ARW-742



ARW-UV180 *For order* **220123035**

Led wood lamp kit

ARW-UV180 ultraviolet lamp is also called Wood's Spotlight, Black Light Lamp, UV Lamp and Fluorescent Leak Detection Lamp!

It is a small flashlight equipped with lithium batteries with LED cold light technology that offers a duration of approximately 50,000 hours of use. ARW-UV180 UV lamp produce a powerful concentrated and constant ultraviolet light, the on/off button is positioned behind the lamp to prevent accidental start-up and the battery is charged for about 6 hours using normal power outlets.

ARW-UV180 lamp black light spectrum is pure, a saturated UV-A component and black light filter, completely eliminate visible light, harmful light, for fluorescence detection in the field of non-destructive testing "NDT" for material and weld flaw and crack detection, oil spot contamination detection, leak detection, and mineral exploration.



- **Quick start**, on and off, without preheating
- **Screenshot from electromagnetic interference**, can work in strong magnetic field
- Compact and extremely robust, low energy consumption and long life low temperature operation
- **Long life** of the LED lamp of about 50,000 hours
- Change the design in the tail, prevent accidental startup, more safe and stable
- Lithium battery can be used continuously for more than 2 hours, equipped with power supply and car charger, easy to charge
- **Safety and spectral purity**, free from UV-B and UV-C components
- 380mm illumination is 30000 uw/cm², LED technology illumination stability is high, ultraviolet light decay can be ensured
- High intensity ultraviolet energy is released and previously invisible fluorescence can be seen in sunlight and beyond
- Complies with **IP65** degree of protection, dustproof
- Equipped with a current regulator which **keeps the UV intensity constant** even if the battery runs out
- All components, including the Torch, are RoHS certified according to 2002/9



Kit Standard configuration Wood spotlight ARW-UV180

- UV LED flashlight
- 2 Batteries complete with recharging system
- UV protective glasses
- Portable carrying case with belt holster
- ABS case
- User manual



TECHNICAL SPECIFICATIONS

Light source	1 LED UV-A 365NM
UVA wavelength	290-390 nanometers (Peak 365 nanometers +/- 5nm)
UVA irradiation intensity	30,000µw/cm ² at 38cm from (15in)
Irradiation area	Ø30 mm (1.2 in), Ø70 mm (2.8 in) beam center beam at a distance of 38 cm (15 in)
Lamp style	flashlight handle
Dimensions	Length: 15.9cm (6.3in)
Weight	226g (9,402 Oz)
t visible (380-780 nm)	≈10 Lux, with black filter 38cm of visible light intensity less than 10 lux
Power supply	1 X 3,350 mAh lithium battery, 3.6 volts DC
Duration	3 hours (+/- 5%), 2 operating cycles with the two batteries supplied, approximately 6 hours
Charging time	2 hours of 90% charge, about 8 hours full charge
External charger	One 100-240V AC charger, you can charge two batteries at the same time
Degree of protection	IP 65



Fluorescent Penetrating Spray 4455 (400cc)

Fluorescent Liquid Penetrant (5lt. tank)

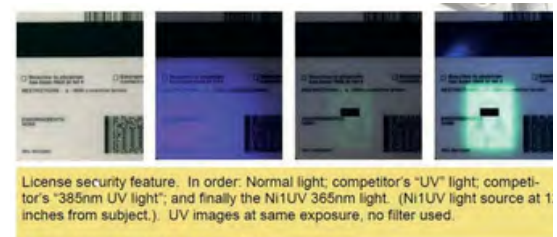
Fluorescent Liquid Penetrant (Tank 25lt.)

ARW-UV103D For order **220123035**

Wood spotlight

The ARW-UV103D Wood Light Spotlight is a portable UV lamp with LED technology featuring Three UV LEDs and one visible white light LED that offers the optimal solution for all Non-Destructive Testing (NDT) tests, which we know with the Italian acronym CND (non-destructive testing) for the control of defects and cracks on materials and welds in combination with fluorescent penetrant liquids and inspections with fluorescent magnetic particles in the case of combination with the magnetoscopy method. Defects such as fine cracks on load-bearing structures, sealing details or in many other critical components can be extremely dangerous for safety and are enhanced during inspection by means of contrast with the fluorescent liquid.

- **Minimizes time** by accelerating inspection times with powerful UV light beam with the widest and most uniform beam on the market
- Eliminates the need for a separate flashlight to check visible spots by featuring a built-in white light LED with over 1500lux power
- **Improves energy and operational efficiency** thanks to the low consumption offered by LED technology, a reduction of up to 82 compared to 400 W halogen lamps and up to 45 compared to mercury vapor lamps
- Long-life LEDs are more reliable and require less maintenance over time
- Compact and rugged aluminum alloy construction with ergonomic handle, fully sealed high-strength housing and a cooling system and non-fogging lenses for reliable and consistent inspections
- There is a **battery charge indicator** on the top of the lamp. Press the test button and the charge is displayed at 20%, 40%, 60%, 80% and 100% respectively. When the charge is close to 20%, charge the battery as soon as possible
- Safer working conditions, eliminates the possibility of operator burns thanks to cold LED technology
- **Eliminate hazardous mercury vapor waste disposal** for safer working conditions
- Meets national requirements of GB/T 15822 and international magnetic particle inspection standards ASTM E2297 and ASTM-E3022
- **Black color filter**, compliant with ASTM E3022 standard
- The built-in fan keeps the LEDs cool to maintain optimal light output during extended use
- Rubber guard with glass lens protects LEDs from damage
- **UV-absorbing goggles** are included in the delivery



License security feature. In order: Normal light; competitor's "UV" light; competitor's "385nm UV light"; and finally the Ni1UV 365nm light. (Ni1UV light source at 1 inches from subject.) UV images at same exposure, no filter used.



Living gecko under normal illumination (above) and demonstrating skeletal fluorescence under 365nm illumination (below).



Fluorescent Penetrating Spray 4455 (400cc)
Fluorescent Liquid Penetrant (5lt. tank)
Fluorescent Liquid Penetrant (Tank 25lt.)

TECHNICAL SPECIFICATIONS	
Light source	3 UV-A 365NM LEDs 1 visible light LED (1500lux)
UVA wavelength	290-390 nanometers (Peak 365 nanometers)
UVA irradiation intensity	UVA 4500 uW/cm²
Irradiation area	at 38cm it is about 200mm
Lamp style	pistol grip
Dimensions	150x140x250mm(6 x 5.5x10 inch)
Weight	0.9kg approx
White light LED intensity	300 candles (3,229 lux)
Power supply	24V 3000mA rechargeable battery pack (100 260v AC power, 50/60 Hz)
Autonomy	5 hours (Charging time is about 2-5 hours)
Degree of protection	IP 64
Power cord length	About 3m
Operating conditions	Altitude up to 2,000 m (6,562 ft.); Temperature 5°C to 40°C (41°F to 104°F); Maximum relative humidity 80% for temperatures up to 31°C (88°F)

ARCHEM PENETRANT LIQUIDS



ARW-ARCHEM

Cleaner For order **110010010**

Penetrant For order **110007450**

Developer For order **110007451** [Price each \(package min. 10pcs\)](#)

Penetrant liquids are a product used in non-destructive testing of materials; they give the name to the control technique itself. The examination with penetrant liquids is aimed at ascertaining the existence of discontinuities that emerge on the surface to be examined. Some classes of production processes (heat treatments, surface finishes, welding, etc.) can produce surface defects which are very dangerous since the heaviest stresses are precisely those that act on the surface. The check is mainly carried out on metallic materials, but it can also be performed on materials of other nature, provided they are inert with respect to the products used for the investigation and are not excessively porous. The analysis is based on the penetration of a liquid with certain characteristics of capillarity, viscosity, wettability and density inside a discontinuity emerging on the surface.

After the removal of the excess liquid and the application of a detector (an absorbent liquid usually based on amorphous silica "Developer") every single discontinuity (Crack) is highlighted. The LPI method covers the 1st level of NDT (non-destructive testing) and is often used in a complementary way to other superficial non-destructive techniques (magnetoscopy in particular) and volumetric (ultrasound and radiography).

Type of liquids:

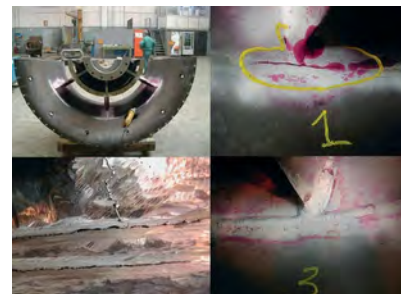
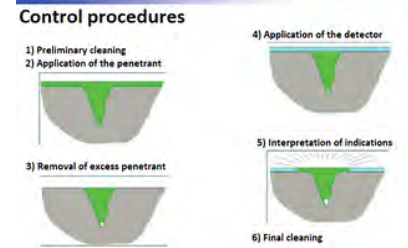
- **Solvent (PRE-CLEANER)** For cleaning the surfaces to be examined and for removing excess penetrant. Absolutely free from chlorides and sulphides
- **Liquid penetrant (PENETRANT RED)** With high sensitivity and a high content of colored pigments. Certifiable on request for current regulations. The penetrant is washable with water or removable with the cleaner.
- **Developer (WHITE DETECTOR)** In a mixture of highly volatile alcohol. To be applied by spray only. Examine immediately after complete drying of the layer. Absolutely free from chlorides and sulphides.

Regulations

- UNI 8374 (1982) "Products for testing with penetrant liquids: classification, characteristics and tests"
- UNI EN 571-1 (1998) "Examination with penetrant liquids: general principles"
- UNI EN ISO 3452-4 "Examination with penetrating liquids: equipment"



Control of penetrant liquids ARW MISURE



PERMANENT MAGNET YOKE



ARW-H1 For order **220122498**

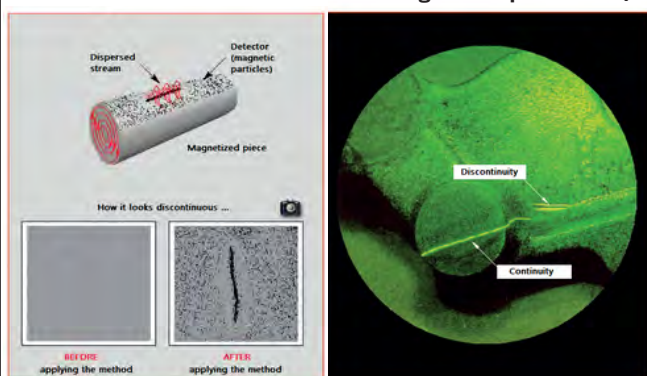
Permanent magnet

The ARW-H1 yoke is particularly suitable for use in places where there is no connection to the electricity grid and for use inside closed tanks and containers.

TECHNICAL SPECIFICATIONS

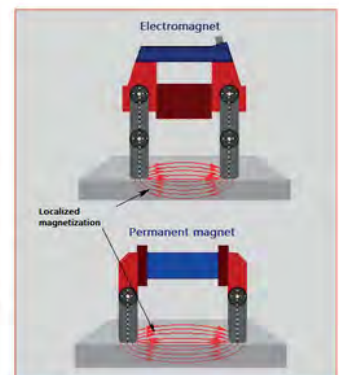
Length max	200
Height	158
Pole diameter	30
Weight	2,2 kg
Lifting force	22,60 kg (Norm. ASTM E 1444/ E1444M-12)

The Magnetoscope Method (MPI)



- ✓ The technique involving the use of these devices produces a localized longitudinal magnetization
- ✓ Induction lines are produced near the poles of the magnet or electromagnet
- ✓ Both in the permanent magnets and in the electromagnets the pole pieces are articulated to allow greater adaptability to the particular geometric configuration of the piece

Magnetization on the surface



ARW-OME200 AC/DC For order **220122860**

Electromagnetic yoke, CND Defect detector

The electromagnetic yoke is an instrument used in the "CND" sector of non-destructive testing. Its application consists in the search for surface and sub-surface defects such as cracks, inclusions, flaking, and more mainly aimed at checking welding or manufacturing of manufactured articles in ferromagnetic material. The "Magnetoscopy" method is one of the most used NDT checks and consists in creating a magnetization of the examined surface, on which magnetic liquid or magnetic powder will then be placed with the function of signaling the position and extent of any defects found. The system consists of a feeder connected to a yoke with articulated arms to adapt to the geometry of the piece.



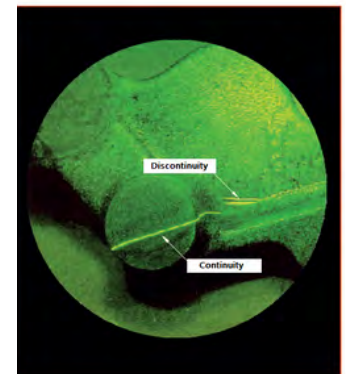
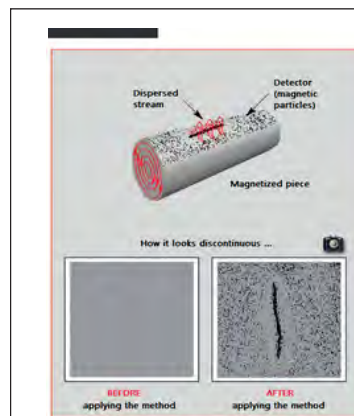
Black Magnetic Spray (400cc)

White Contrast Lacquer (400cc)

TECHNICAL SPECIFICATIONS	
Power supply	AC 220V±10% 50HZ
Operation	AC/DC with selector
Lifting power	≥ 6kg (58.8N) in AC and ≥18.1kg (177N) on DC
Power supply dimensions	260×140×170mm
Total weight	ca. 9kg

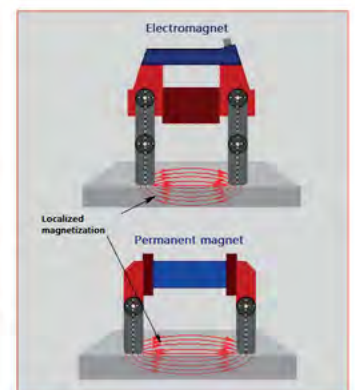
Jointed yoke
It is also called a horseshoe probe or welding probe and features a movable angled magnetic head. The pole distance is 10-210mm; weight: 2kg.

The Magnetoscope Method (MPI)



Magnetization on the surface

- ✓ The technique involving the use of these devices produces a localized longitudinal magnetization
- ✓ Induction lines are produced near the poles of the magnet or electromagnet
- ✓ Both in the permanent magnets and in the electromagnets the pole pieces are articulated to allow greater adaptability to the particular geometric configuration of the piece



MULTIMETER



ARW 992 L [For order 220121186](#)

Digital multimeter

Compact multimeter, suitable for measuring voltages in the "DC and AC" scales, current in "DC", resistances and diodes. This type of instrumentation is used in the electronic and electrotechnical sector for use in the professional field, in specialized laboratories, hobby and domestic use.



- Basic Accuracy 0.5%
- Date HOLD function
- **Backlit display**
- Protections via fuse "F1" 500mA / 250V - "F2" 10A / 250V
- Dimensions 121.5x60.6x40 mm
- Weight 150 g
- Supplied complete with shockproof protective shell, test leads, battery and user manual
- 2000-count multimeter, Transistor test
- Safety 600 V cat. The IEC 1010 standard

TECHNICAL SPECIFICATIONS

Volt DC	200.0 mV ÷ 600 V
Volt AC	200.0 V ÷ 600 V
Ampere DC	2000 µA ÷ 10 A
Resistance	2000 Ω

ARW 9912 [For order 220121276](#)

Digital multimeters

Digital multimeters with double molded plastic cover and high contrast maxi display of 4000 points. The instruments are supplied complete with test leads, wire temperature probe for general use (max 250°C) and user manual.



- Display points
- Safety design
- Date HOLD
- Auto Ranging function
- MAX HOLD function
- Auto shut off
- 600V CAT III safety
- Dimensions: 150x70x48mm - Weight: 255g

FUNCTION	CAPACITY	PRECISION
DC voltage	600V	±0.5%
AC voltage	600V	±1.2%
DC current	10A	±2.5%
AC current	10A	±3.0%
Resistance	20MΩ	±0.8%
	40MΩ	±0.8%
Capacity	200µF	±3.0%
Frequency	10MHz	±1.5%
Temperature	760°C/1400°F	±3.0%
Cyclic report	0.1% ÷ 99.9%	±1.2%
Diode test		
Continuity test		

ACCESSORI OPZIONALI

Code	Description
221120956	Standard size tips
221120957	ARW C 820 vinyl carrying case
	Temperature probes for versions 9911 - 9912 (see thermometers and probes)

MULTIMETER



ARW-965BT For order **220122833**

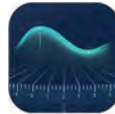
Heavy-duty multimeter with Bluetooth connection

The ARW-965BT is a professional waterproof multimeter with a resolution up to 6000 display points. Meets CAT IV 600V requirements confirming the highest level of surge resistance. It is a combination of accuracy, ease of use, safety and reliability. ARW-965BT is a digital tester suitable for use in harsh industrial conditions. "Heavy Duty".

- Voltage input terminals have protection up to 1000V AC/DC with all other measurement inputs up to 600V AC/DC
- Current inputs are protected by 10A / 1000V and 800mA / 1000V fuses
- **Bluetooth** interface
- **Application downloadable for free on your Smartphone or Tablet (APP Compatible Ios/Android)**
- Display Count: 6000
- Auto Range
- True RMS
- Duty Cycle 0.1~99.9%
- Test Diodes
- Auto Shutdown (15 min.)
- Continuity buzzer
- Low battery indication (Low Battery ≤4.5V)
- Data Hold/Relative Mode functions
- MAX/MIN/AVG
- Peak Value
- Analog Bar Graph
- Low input impedance for DCV/ACV measurements >3kΩ @ 600V MAX.
- Input impedance for DCV around 10MΩ
- Dimension (H x W x D): 170mm x 74mm x 45mm
- Weight: 218g



Meterbox pro



IP 67 waterproof



shockproof



backlit keyboard



built-in flashlight



Meterbox pro mobile app



TECHNICAL SPECIFICATIONS	MEASUREMENT RANGE	ACCURACY
DC voltage	600mV/6V/60V/600V/1000V	±(0.1%+2)
AC voltage	600mV/6V/60V/600V/1000V	±(0.8%+10)
DC current	600μA/6000μA/60mA/600mA/6A/10A	±(0.5%+10)
AC current	600μA/6000μA/60mA/600mA/6A/10A	±(0.8%+3)
Resistance	600Ω/6KΩ/60KΩ/600KΩ/6MΩ/60MΩ	±(0.8%+10)
Capacity	60μF/600μF/6μF/60μF/600μF/6000μF	±(3.0%+10)
Frequency	10Hz-10KHz	±(0.01%+5)
Temperature (°C)	-20°C~760°C	±(1.0%+3°C)
Temperature (°F)	-4°F~1400°F	±(1.8%+4°F)

CURRENT CLAMPS

ARW 3343 For order **220121244**

AC, AC/DC clamp meters

Professional clamp set for current, voltage, resistance, capacitance, frequency and diode test measurements. Easy to use even in confined spaces thanks to the slim structure and teardrop-shaped jaws.



- Supplied complete with vinyl case, general purpose wire temperature probe (max. 250°C), test leads, batteries and user manual



TECHNICAL SPECIFICATIONS	3343
Display points	4000
Electronic overload protection	•
Continuity buzzer and diode test	•
Date HOLD	•
Zero DCA function	•
AC/DC current	•
Low battery indicator	•
Auto shut off	•
Backlit display	•

FUNCTION	CAPACITY	PRECISION	RESOLUTION	3343
AC current	1000A	±(2.5%+5d)	1mA	•
DC current	1000A	±(3.0%+4d)	10mA	•
AC voltage	600V	±(0.8%+2d)	0.1mV	•
DC voltage	600V	±(1.0%+4d)	0.1mV	•
Resistance	40MΩ	±(1.0%+4d)	0.1Ω	•
Capacity	100.0nF	±(1.2%+3d)	0.01nF	•
Frequency	10MHz	±(1.2%+3d)	0.01MHz	•
Frequency	100KHz	±(1.2%+3d)	0.1kHz	•
Cyclic report	99.9%	±(1.2%+3d)	0.1%	•
Temperature	1000°C/1832°F	±(3.0%+3d)	0.1°C/°F	•
Dimension	229x80x49mm - Peso: 303g			

ARW-3383 RMS Bluetooth For order 220122834

Multifunction clamp meter

Professional instrument for heavy use AC, AC/DC True RMS with Autorange function. Equipped with numerous functions including the double temperature input for type K thermocouples and the Bluetooth connection for connection to Smartphones and Tablets via the free APP. Compact and solid structure with a large backlit display and a shockproof protection to protect it from accidental drops.

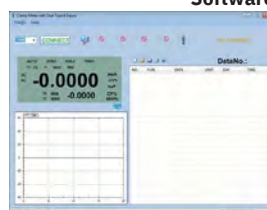
- Double input for K-type thermocouples
- High resolution with 50,000 display Points
- RMS ACV / ACA function
- Supplied complete with software CD for PC data management
- Increased measurement safety thanks to the shockproof protection that surrounds the instrument
- Application downloadable for free on your Smartphone or Tablet (APP Compatible Ios/Android)
- Current measurement : AC/DC
- Display backlight
- Data Hold & Peak Hold
- Max /Min
- REL function (Zero)
- Wide jaw opening 1.9" (48mm)
- "Phase Finder" NCV detection
- Bluetooth interface
- Dimensions (HxWxD): 230 x 76 x 40mm
- Weight: 315g.



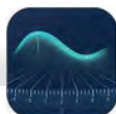
Delivery kits:
Meter, test leads, carrying case, general purpose wire temperature probe (Max.250°C), software CD and 9V battery.



Software



Meterbox pro



TECHNICAL SPECIFICATIONS	MEASURING RANGE	ACCURACY
Function	Function	Basic Accuracy
DC voltage	600V	±(0.1%+4d)+
AC voltage	600V	±(1.0%+3d)
DC current	1000A	±(2.5%+5d)
AC current	1000A	±(2.5%+5d)
DC current µA/mA	5000.0µA/500.00mA	±(1.0%+3d)
AC current µA/mA	5000.0µA/500.00mA	±(1.5%+30d)
Resistance	50MΩ	±(3.0%+5d)
Temperature	1000°C/ 1832°F	±(1.0%+2.5°C/4.5°F)
Capacity	5mF	±(3.5%+10d)
Frequency	10MHz	±(0.3%+2d)
Continuity check	Sound signal, Buzzer at 35Ω	
Diode test	Test current 0.3mA	

ARW-3352 For order 220122234

Current clamp

Professional high resolution caliper with 40,000 display points equipped with True RMS function and kW/kVA power measurement. Built according to EN 61010-1 standards with CAT III 1000V / CAT IV 600V protection degree

- True RMS AC measurement
- 40,000- points display
- kW/kVA power measurement
- Electronic overload protection
- "K" thermocouple probe input
- Max/Min function. and Data Hold
- Analog bar graph
- Inrush current function, function inrush current
- Jaw opening 55mm (2.16")
- NCV detection led (No contact voltage detector)
- Backlit display
- Zero function
- AC/DC current
- Auto shut off
- Low battery indicator
- Dimensions: 295x100x46mm
- Weight: 537gr.

EMC & LVD
EN: 61326
EN: 61010-1
EN: 61010-02-031



Supplied complete with:
vinyl case, general purpose wire temperature probe (max. 250°C), test leads, batteries, user manual

FUNCTION	RANGE	ACCURACY	RESOLUTION
AC current	1500A	±(2.8%+5d)	10mA
DC current	1500A	±(2.0%+4d)	10mA
AC voltage	750V	±(0.5%+5d)	0.01mV
DC voltage	1000V	±(0.1%+5d)	0.01mV
AC kW/kVA:	900.0kW	±(2.5%+10d)	
(AC kW/kVA 0-600V, 0-1500A, 50/60Hz)			
DC kW/kVA	900.0kW	±(2.5%+10d)	
(DC kW/kVA 0-600V, 0-1500A, 50/60Hz)			
Power factor	0.3 .. 1	±(2.5%+10d)	0.01Ω
Resistance	40.000MΩ	±(0.5%+4d)	0.01Ω
Capacity	40.00mF	±(3.0%+5d)	0.01nF
Frequency	40.000MHz	±(1.2%+2d)	0.01Hz
Inrush Current	1500A	±(1.5%+2d)	0.01MHz
Temperature	1000°C/1832°F	±(1.0%+1°C/1°F)	1°C/°F
Continuity check	Acoustic buzzer at 50Ω		
Diode test	Test current 0.3mA		
Battery	9V (NEDA 1604)		

Security

For indoor use, double insulated instrument compliant with standards IEC1010-1 (2001): EN61010-1 (2001). Overvoltage Category III 600V and Category II 1000V, Pollution Degree2.

INSULATION METER



ARW-5500

For order [220121263](#)

ARW-5505W

For order [220121841](#)

Insulation meter



The electrical insulation test is one of the important parameters that must be performed to guarantee the electrical safety standards, the ARW-5500 meter is a simple and compact instrument for the use of electrical system checks with a maximum range of 2000 MegaOhm and minimum resolution 0.1 MΩ (4000 MΩ and minimum resolution 0.01 MΩ for model ARW-5505 Kit of supplies: 6 1.5V AA batteries, test leads, ABS case and user manual

- Complies with IEC10101, CAT III 1000V
- Large backlit dual display
- HOLD function for continuous monitoring
- I can run the continuity test
- Out of range indicator
- Low battery indicator
- Compact and portable test set
- Dimensions 200x92x50mm
- Weight 600g (with batteries)
- Insulation resistance test voltage 250V/500V/1000V (125V/250V/500V/1000V for the ARW 5505 version)



ARW-5500 TECHNICAL SPECIFICATIONS			
Functions	Range	Resolution	Precision
AC voltage	750V	1V	±1.2%rdg±10dpts
DC voltage	1000V	1V	±0.8%rdg±3dpts
Resistance	200Ω, 2000Ω	0.1Ω, 1Ω	±1%rdg±2dpts
Insulation resistance	200MΩ, 2000MΩ	100kΩ~1MΩ	±3.5%rdg ±5dpts
Voltage test	250V-200MΩ/500V-200MΩ/1000V-200MΩ		
Continuity test	Active Sound Level: ≤40Ω, Test current ≤200mA		
Operating conditions	0°C~40°C (<80%R.H.)		
Storage conditions	-10°C~60°C (<70%R.H.)		
Power supply	Batteries 1.5V "AA" x 6		

TECHNICAL SPECIFICATIONS ARW-5505			
Functions	Range	Resolution	Precision
AC voltage	750V	1V	±1.2%rdg±10dpts
DC voltage	1000V	1V	±0.8%rdg±3dpts
Resistance	40Ω, 400Ω	0.1Ω, 1Ω	±1.5%rdg ±6dpts
Insulation resistance	4, 40, 400,4000MΩ	100kΩ~1MΩ	±2.0%rdg ±6dpts
Voltage test	125V/250V/500V/1000V 1mA nominal		
Continuity test	Active Sound Level: ≤40Ω, Test current ≤200mA		
Operating conditions	0°C~40°C (<80%R.H.)		
Storage conditions	-10°C~60°C (<70%R.H.)		
Power supply	Batteries 1.5V "AA" x 6		

ARW-5500

ARW-5505



ELECTRICAL SPECIFICATIONS ARW-5505					
Voltage	Range	Resolution	Precision	Test Current	Short circuit current
125V(0%~+10%)	0.125~4.000MΩ	0.001MΩ	±(2%+10)	1mA@load125kΩ	≤1mA
	4.001~40.00MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0MΩ	0.1MΩ	±(4%+5)		
250V (0%~+10%)	0.250~4.000 MΩ	0.001MΩ	±(2%+10)	1mA@load250kΩ	≤1mA
	4.001~40.00 MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0 MΩ	0.1MΩ	±(3%+5)		
500V(0%~+10%)	0.500~4.000 MΩ	0.001MΩ	±(2%+10)	1mA@load500kΩ	≤1mA
	4.001~40.00 MΩ	0.01MΩ	±(2%+10)		
	40.01~400.0 MΩ	0.1MΩ	±(2%+5)		
1000V (0%~+10%)	1.000~4.000 MΩ	0.001MΩ	±(3%+10)	1mA@load1MΩ	≤1mA
	4.001~40.00 MΩ	0.01MΩ	±(3%+10)		
	40.01~400.0 MΩ	0.1MΩ	±(2%+5)		
	400.1~4000 MΩ	1MΩ	±(4%+5)		

EARTH RESISTANCE METER

ARW 5300 B

For order [220121655](#)

Digital earth resistance meter

It uses the most recent electronic technology for its operation, thanks to which it is possible to obtain high precision measurements both in the civil and industrial sectors. This instrument is used at electrical installers, maintenance services and tests on industrial production lines of electrical equipment.

- Automatic adjustment of 0
- Sampling: 2.5 times per sec.
- Out of range indication
- Low battery indication
- Large double-line backlit LCD display
- Supplied complete with case, leads, pegs and 6 x 1.5V AA batteries.



	RANGE	RESOLUTION	ACCURACY
Earth resistance	10 ohms	0.01ohm	±2%rdg±0.1ohm
	100 ohms	0.1ohm	±2%rdg±3dpts
	1000 ohms	1ohm	±2%rdg±3dpts
AC Voltage	750 V	1V	±1.2%rdg±10dpts
DC Voltage	1000 V	1V	±0.8%rdg±3dpts
Resistance	200k ohm	0.1 ohm	±1.0%rdg±2dpts
Continuity Test	Sound Trigger: <40ohm, Current <200mA		
Power supply	1.5V"6 AA battery"		
Dimensions	200x92x50mm		
Weight	700 g, including batteries		





arroweld italia Group

The Arroweld Italia Group is the most innovative industrial distribution company operating in Italy today.

Founded in 1976, through a continuous transformation process that began with a management buy-out operation in 1990, after the premature death of the founder in 1988, Arroweld has been able to trace, in the following 20 years, a new path in the distribution of products and services for industry, proposing itself to the market as a multi-channel, multi-sector company with a unique and constantly expanding offer.

The addition of cutting-edge commercial tools that has always characterized our group guarantees our customers an extremely qualified pre- and post-sales service, mainly in products with a high technological content.

Today the Arroweld group is the market leader in industrial distribution with a consolidated turnover of 100 million euros. It has 500 employees, 250 commercials, 8 companies with 22 sites and branches for a total of 55,000 m² of warehouse.

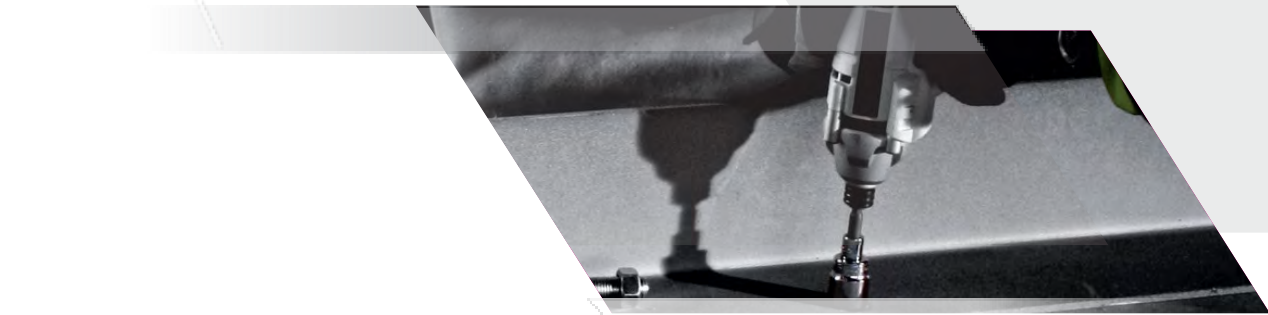
The strategy: Develop by consolidating

The group's strategy moves in two directions. The first oriented towards development with the continuous expansion of the project of aggregation of companies in industrial distribution through acquisitions capable of inserting new brands, giving new contents and strengthening existing ones. The second characterized by the faithful commitment that Arroweld considers essential in pursuing an objective of constant improvement of the internal organization in order to be increasingly attentive and performing in the service provided to customers.

The Mission: To create value

- Maintain national leadership as a group specialized in industrial distribution by building an image that exerts great fascination with collaborators and customers.
- Obtain this result by promoting the development of the potential of each of the company's collaborators by paying attention to their expectations and the customer's expectations.

arrowe



MEASUREMENT AND CONTROL INSTRUMENTS

ARWMISURE, measurement and quality control systems, part of the Arroweld Italia spa group, is a consolidated reality in the sector, able to satisfy the highest market needs through a vast range of instrumentation combined with a very efficient assistance and service network. It provides all the know-how to help the customer easily deal with all the obligations in terms of safety and quality control that the market requires. It has an internal assistance and calibration service, which takes care of the certification of all new instruments purchased or directly on your internal instrument fleet with the advice of qualified personnel available for any information or specific advice.

a consolidated
turnover of

€100 million

Arroweld.com



The ARW Measurements Certification laboratory

Our company is able to offer a complete service to companies in terms of calibration and certification of electronic or mechanical measuring instruments for environmental and industrial controls of all kinds. In addition to having the indispensable technical expertise, it is equipped with the most modern instrumentation capable of ensuring technical and metrological validity in the measurements carried out.

All activities are regulated according to the quality procedure in compliance with internationally recognized standards, guaranteeing high competence and reliability.

The most important guarantee of reliability remains the experience of our technical staff, qualified and constantly updated, able to assist the customer in every consultation and requirement regarding the continuous improvement of its quality system.



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ARW

MISURE

On request, quotations for ISO certifications are made

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