

#### presents



safety bubble device

the electronic device for the control of social distancing (and not only!)



### Who we are: companies and partnerships

altran Part of Capgemini

Creation of Business Intelligence and Big Data Analytics modules, on order



Technology transfer, research and development and support:

Consiglio Nazionale delle Ricerche









### Personal Protective Equipment (PPE) for social distancing at work, in the supermarket, in communities





## **Safety Bubble Device**

Personal Protective Equipment (PPE) for social distancing at work, at the supermarket, in communities

### How does it work

The device continuously sends a signal into the environment, looking for other devices in its vicinity and creating around the person wearing it a sort of "bubble" that has a predefined radius (the "safety distance").

When one or more devices worn by other people approach and pass the "safety distance", each affected device starts vibrating to warn that it is in a risky situation, or alternatively emits a perceptible sound.









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## You can also group products into groups of "related devices".

For example, on construction sites, some types of operators must perform the work close to a colleague and at a distance less than the safety distance: their devices, configured as "similar", do not generate all the alarms during the activities, while emitting a warning if other non-similar devices from other colleagues are approached.

Similarly, in a museum, "related devices" delivered to a family do not generate alarms if relatives are approaching, but perceive the excessive approach of strangers.



CONTACT TRACING CIAS (Collision Identification and Analysis Software): the recording of events (entry into the "bubble") in accordance with the workers' statute and the GDPR

The device does not collect the position of the employee during operational activities (in compliance with the provisions of the workers' statute and the GDPR, according to which systematic monitoring of the worker is illegal).



The device records and sends to an application, supplied with the products, exclusively the events characterized by the excessive and prolonged proximity of one or more devices, for a period of time in compliance with the health prescriptions defined from time to time, or by a body temperature which remains above a threshold value for a significant period.

In accordance with the principle of software by design - by default, the data managed by the application are pseudonymised. In case of their request by the Public Security, it will be possible to associate the events to the individual persons concerned, in order to inform and act for the protection of their health.



# Ability to monitor and identify critical "hot areas"

With the installation of beacons or gateways in critical areas (company canteen, dressing room, break area) the system provides, with a separate software application, real-time and anonymous monitoring of the average number of collisions in the «quadrants» into which the area of interest is divided. This configuration provides to receive a warning when a maximum number of "collisions" occurs in the whole area, for the activation of the corrective actions of the behavior and / or of the adjustments in the area layout.





## **Safety Bubble Device**

Personal Protective Equipment (PPE)

for social distancing at work, at the supermarket, in communities

Funzione / servizio	Serie S (Social)	Serie I (Industrial)
Distanza COVID per generazione allarme, parametrica		X
Tempo permanenza per generazione allarme COVID, parametrico		X
Aggiornamenti firmware mediante gateway		X
Distanza variabile in aree diverse della location (musei)	Х	X
Clusterizzazione utenti (dispositivi "amici")	Х	X
Sensore LED per alert covid o altro alert	Х	X
Sensore motore vibrazionale per alert covid o altro alert	Х	X
Sensore sonoro per alert covid o altro alert	Х	X
Combinazione alert ad attivazione sfasata (prima vibrazione poi sonoro)	Х	X
Sensore temperatura opzionale		X
Livello batteria con lampeggiamento LED	Х	X
EEPROM Storage		X
Supporto Clip in TPU		X
Supporto Laccetto portabadge		Х
Supporto Bracciale da polso in TPU	Х	X
IP55		Х
IP67 grazie al contributo del supporto in TPU	Х	Х
Possibilità IP68 con supporto in TPU	Х	X
Possibilità estensione garanzia di legge		X
Durata carica della batteria > 36 ore consecutive		X
Caricabatteria con cavo USB opzionale	Х	Х

## **Advantages for employers**

- Evidence of the maximum corporate commitment following the enrichment of the standard equipment of PPE provided to workers (masks, gloves, etc.) through a technologically advanced and state-of-the-art social distancing device
- Workers' learning of correct social distancing behaviors facilitated by a better perception of distances
- Greater serenity of the work environment with improvement of the corporate climate during PHASE2
- Minimization of the impact on the continuity of production activities, following the identification of <u>all and only</u> the operators who came into contact with a worker who tested positive for COVID-19
- Protection of workers 'health and privacy rights (no traceability, no geolocation) in accordance with the Italian Workers' Statute and the GDPR
- Inclusion of the device among those admitted to the tax credit (Italian law "DL rilancio") and to the non-refundable contribution (the credits are transferable to third parties, the banking institutions are included among the assignees)



Smart sensors for measuring distances between devices





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GDPR compliant data collection platform

As an alternative to vibration, the device emits an alarm sound signal

When a person has

entered the perimeter of the bubble, the device vibrates

Autonomous

battery to always

keep the device active

## **SUPPORTI**





TPU wrist bracelet easy to sanitize

Badge holder strap



High visibility vest or bib with stitched device



clip

#### **BADGE HOLDER STRAP**







#### **POCKET CLIP**







#### WRIST BRACELET - INDUSTRIAL SERIES WITH INTEGRATED MEMORY FOR THE RECORDING OF "COLLISIONS"





#### WRIST BRACELET – SOCIAL SERIES WITHOUT INTEGRATED MEMORY





#### **Beyond PHASE 2: alternative uses of the device**

<u>Access control (1)</u>: the device can be used, connected to the turnstiles, to replace the access control badges

Access control (2): the device can be used for access control in quotas or authorized accesses

<u>Attendance control:</u> the device can be used to control the number of people in a work or social environment

<u>**PPE Check:**</u> the device can be used to check the completeness of the Personal Protection Equipment worn compared to the prescription provided for the job, after installing low-cost transponders in the PPE











**Process alert / Ticket opening**: call from the machine due to the need for operator intervention and authorization for qualified operator intervention (necessary: display on device, gateway on interconnected machine 4.0)

<u>Check for the presence of people in danger</u>: in the event of an alarm, the device is used to check if there are people (without name) in the building, or (in the presence of a signal / gateway) in the floor / in the room

**Indoor comfort management:** the device can be used to activate or deactivate the local heating / cooling / air exchange / lighting systems

**Management of smart-agile workplaces:** the device can be used to support the management and activation / personalized configuration of workstations, in an organizational way of smart and agile working

















#### SAFETY BUBBLE DEVICE il dispositivo per il distanziamento sociale NEI PARCHI DIVERTIMENTO









is designed and marketed by



#### - Headquarter -

Ancona, via Tiraboschi n. 36G

*info@safetybubbledevice.com numero verde: 800 598 326*  - Contacts -

Simone Fedeli Sales and marketing

s.fedeli@iotalab.it tel: +39 071 925 68 36