



 **MYDASOLI**

DISPOSITIVO ALLERTAMENTO SOCCORSI LAVORATORI ISOLATI

Mydasoli is a professional lone worker safety device developed for alerting rescue teams in case of emergency.

Its intrinsic features make it a suitable product both in industrial environments and in commercial environments.

Features that make mydasoli different than other products:

- best suited in indoor environments where cellphone network coverage can not be guaranteed
- man down alarm, immobility alarm, push button alarm
- indoor geolocation
- alarms received directly on site via sound alerts, voice call, sms, email, I/O relays
- continuous communication check between end device and the alarm receiving unit
- data log of device use (device on, device off, device out of coverage, battery level)
- integration with evacuation systems, access control systems, personal protective equipment check
- no cellphone sim necessary

Dimensione: 110 mm x 60 mm x 25 mm

Frequency: ISM 2.4 Ghz: 2400 MHz – 2438 MHz

weight: 90 gr

Transmission power: 10 dBm

Battery: rechargeable

Operating temperature: -20 °C / + 50 °C





Belt clip

Mydasoli is an industrial smart device designed and manufactured in Italy specifically to solve the problem of timely rescue of those workers who are operating in an isolated context.

Our field experience have led to the creation of an easy-to-wear device (it can be held in many ways), easy to handle and reliable in its operation (alarm redundancy, mesh network).

Mydasoli communication is based on a smart mesh network consisting of

- alarm receiving and dispatching unit
- fixed nodes (necessary in order to expand the system signal coverage or to implement other features like sensors, audio alarm, or localization)
- mydasoli - the wearable emergency device

By using this kind of network we can offer a solution that is not affected by any architectural complexity or dimension. Mydasoli can be used in small environments or extended extensively areas due to the absence of limits in the use of the number of nodes.

Working alone can be a discriminating working condition if no organizational process is implemented that can avoid the isolation factor in assisting the worker.

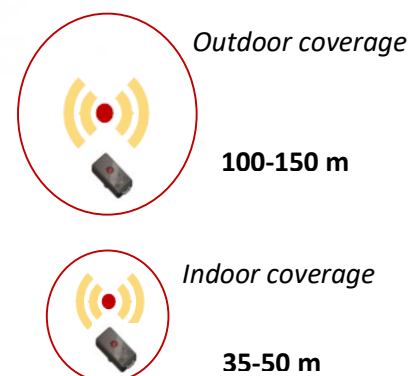
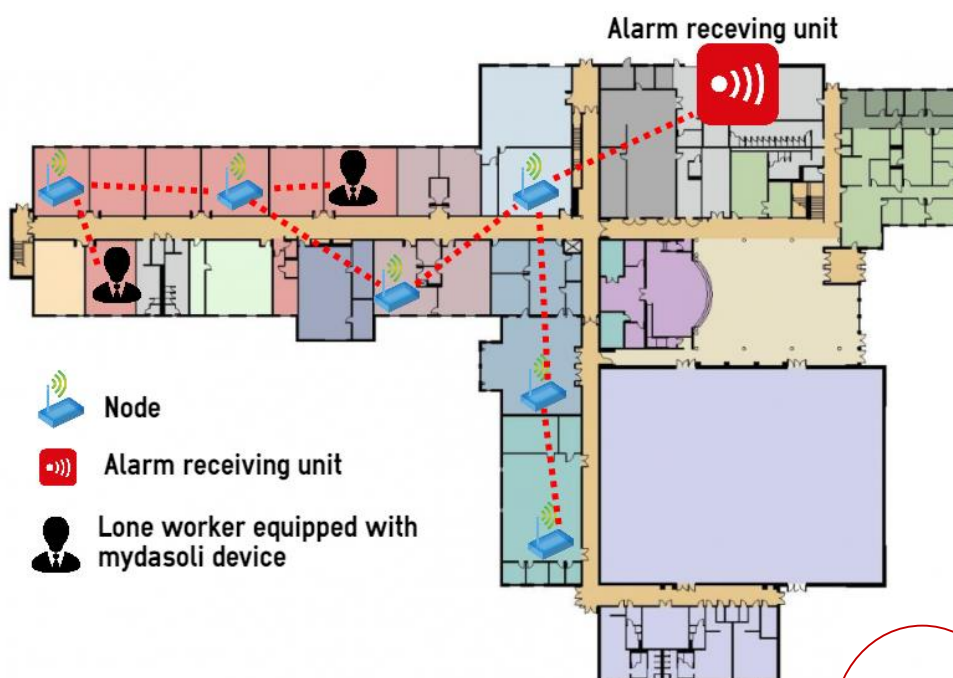
The isolation factor is proportional to:

- the speed to generate an emergency alarm
- the time dedicated to the location of the person
- the promptness to alert the company's emergency rescue chain

Thanks to mydasoli the isolation factor is reset.

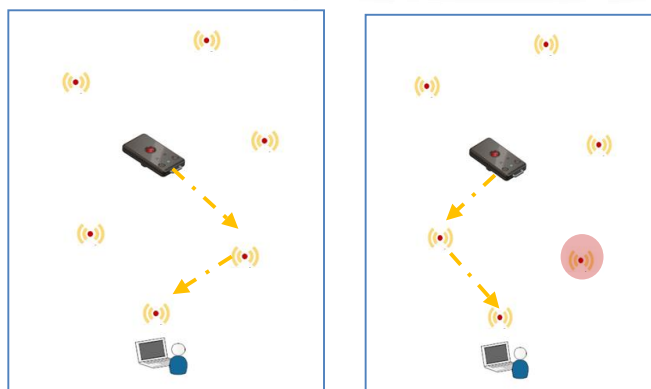
"If organizations have no memory, accidents tend to happen again"

The many functions of mydasoli combined with the flexibility and power of its network allow you to create endless applications that can facilitate control and security in your infrastructure.



EverNet is the intelligent self-configuring network that provides secure and efficient plant management and opens the doors to the Internet of things. Evernet makes the company smarter. AS? WHERE WHEN? BECAUSE? Are all questions that evernet is able to give a precise and safe answer.

Nodes need 220 V power and can be installed in a few minutes.



The system is capable to know the location of a device by using the information regarding the nearest node of the mydasoli device or by using other and more precise technology like BLE beacons.

The alarm generated by mydasoli device is transmitted to the nearest network node. The latter sends it to the nearest node until the transmission to the alarm receiving unit.

By using a mesh network technology the transmission of the alarm is guaranteed even if a node does not work. In fact, the transmission would happen through another working node. Mydasoli is constantly questioned by the network to see if it actually works.

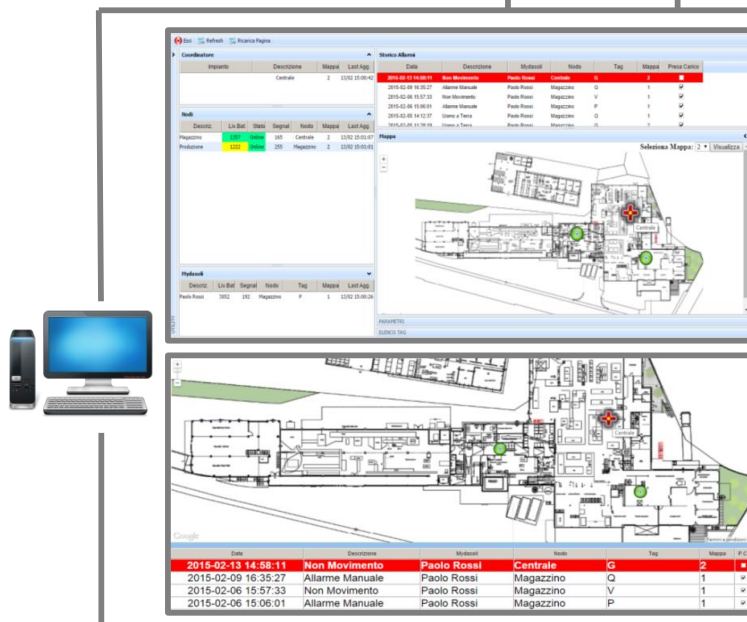
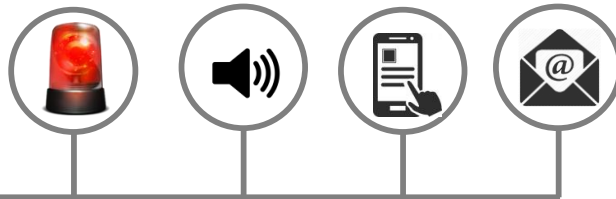
The alarm receiving center checks at any time the state of the batteries, the status of the network (if the nodes work) and if the mydasoli devices are working properly.

Thanks to the alarm receiving unit and the software the employer does not have to worry about checking that the worker uses the device. The alarm center is able to collect data and make it available through its own software or by sending email and sms. Information such as: When the device was switched on, when it was used, when it was switched off, and the alarms received are all available in the alarm receiving unit.

ALARM DISPATCHING

The alarm dispatching system is configurable and automatic. The alarm can be forwarded to:

- pc, monitors
- sound alerts (in the alarm receiving UNIT or distributed across the plant)
- Voice calls with parameterizable call cycles
- sms
- email
- contact id

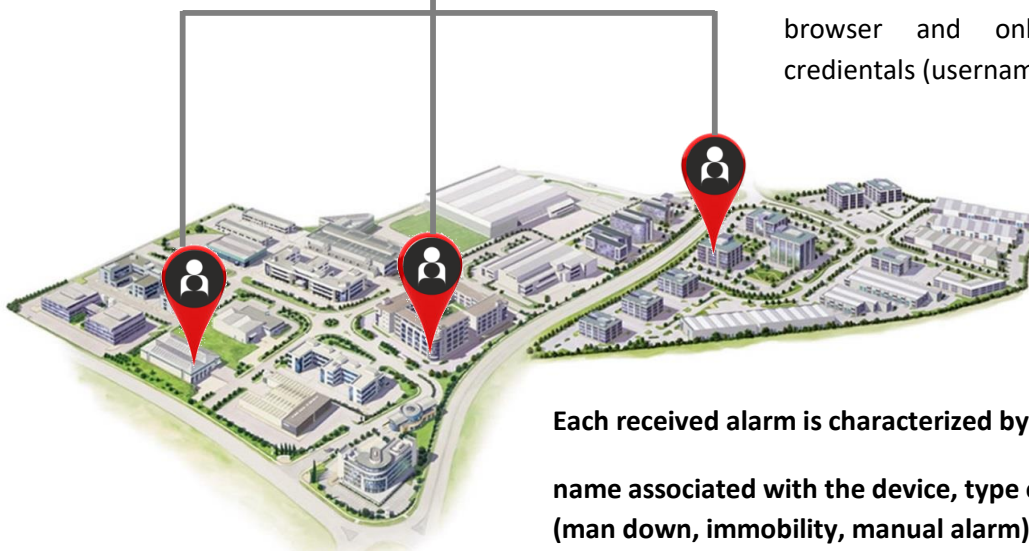


Alarms and location

Mydasoli management software is a web application installed in the alarm receiving center that can:

- receive and forward alarms
- show nodes status and mydasoli status
- report any malfunctions via sms or email
- locate and show the position of an alarm
- set mydasoli parameters

The software is reachable via a web browser and only with specific credentials (username and password)



Each received alarm is characterized by:

name associated with the device, type of alarm generated (man down, immobility, manual alarm), time, location

Caratteristiche funzionali MYDASOLI

MAN DOWN ALARM



The logic of operation is that all abnormal prolonged positions (loss of verticality, immobility) are considered dangerous events and could generate an alarm. Vertical loss is thought to be an abnormal situation and this type of monitoring system offers great adaptability to more isolated work situations. Man down parameters are easily configurable via software and can be different from device to device.

IMMOBILITY



Motion Absence monitoring is usually more difficult to record because a working worker sitting at the desk can not make significant movements for long periods of time. However, mydasoli has a parametrizable sensor that can be used safely even by workers who are constantly sitting. The immobility sensor is also essential for verifying the actual use of the device.

MANUAL ALARM



The mydasoli device is equipped with a dedicated button for sending an alarm.

TEARING ALARM



Tearing alarm is very important because it allows the user greater ease in immediate alarm reporting.

INTERNAL BUZZER



mydasoli is equipped with an internal buzzer that is activated during the alarm and can be used to locate the device by rescue teams

BATTERY CHECK



mydasoli The battery status is signaled locally through the mydasoli device and via software alarm reception unit

SELF-DIAGNOSIS



mydasoli automatically reports technical problems and generates alarms (on the device itself and in the control room). This function, which is of utmost importance, is indispensable because in its absence, the effectiveness of the entire alarm system is decisively affected. The self-diagnosis function is used to report technical failures such as: lack of signal, lack of batteries, general malfunction of the device. Without self-diagnosis, a worker can use a device without actually working. The worker can also perform a manual test. Self-diagnosis of the device can be parameterized with different control intervals (1, 2.5 min.)

ALARM RESET



By using a dedicated key button you can stop sending alarm in the pre-alarm situation

LOCATION



In the event of an alarm, rescue must be as fast as possible. To do this you need to locate the event geographically. Mydasoli system implements localization through a graphical interface and also with a sound localization. In case of an alarm, the device emits a sound that can also alert the staff nearby.

PRE-ALARM



Each automatic alarm (man down and immobility) is preceded by a pre-alarm phase characterized by a sound signal and a vibration of the device. The user can stop this phase by pressing a dedicated button.

Additional features

ACCESS CONTROL



Alerts if a worker accesses an area without wearing mydasoli device.

PERSONAL PROTECTIVE EQUIPMENT CONTROL



Realtime personal protective equipment check using evertag technology.

ADDITIONAL SENSORS INTEGRATION



Every nodes can be integrated with sensors like air quality control

ISOLATED WORKER NOTIFICATION



Applicazione configurabile

By integrating the company's time and attendance system it could be possible to send a notification to a worker that is alone.

FEATURES



Internal buzzer



Battery check



Self-diagnosis



Localization



Manual Alarm



Man down
alarm



Immobility
alarm



Tearing alarm



Manual
alarm rest

INTEGRABLE FEATURES



Isolated worker
notification



Air quality
control



Evacuation
integration



Vital signals
integration



Time
attendance



Access control



Personal
protective
equipment



Asset
management

Example of a system



A plant with

- 1. Production department**
- 2. offices**
- 3. maintainers (electricians, IT, cleaning services)**

In this situation there are two types of isolated workers

1. Personnel that are not monitored for shifts or for work environments (office workers, workers in production departments)
2. Staff during their working routine move to isolated rooms (maintainers)

In such a situation it is evident that adopting systems based on gps and gsm technology (like a mobile phone) is not the best solution.

- a) In indoor context gps does not provide adequate localization accuracy (even hundreds of meters of error)
- b) There is no guarantee that gsm operators have adequate signal penetration in all business areas
- c) There is no immediate signal in the farm
- d) there is no control over the state of the devices and there is no a centralized receiving center

Thanks to the mydasoli system and its mesh network, it is possible to monitor complex business areas such as

- Basements
- Isolated departments
- Refrigerating cells
- Server farm
- Air conditioning room, electric booth,
- Underground parking

Example:

1. The maintainer located in the factory's electric systems room faces a panic situation and sends an alarm

2. On the Monitor Installed in a control room, the alarm will be displayed with the following information:

Name of the maintainer - type of alarm - location - time - map

3. At the same time, audio notification is activated (in the control room or in other areas), and by the sirens on the nodes installed across the plant

4. At the same time, telephone calls are made to personnel who are called upon to intervene in the event of an alarm (eg head of department and other responsible or external surveillance services)

5. At the same time, email and sms can also be sent

6. The alarm will remain stored in the alarm receiving unit and can be consulted at any time

The system requires a central unit, nodes to cover the interested areas and wearable devices. Nodes only need to be connected to 220V (they have a backup battery in case of power failure). The alarm receiving unit can be located in a convenient area with 220V and ethernet network.

The alarm receiving unit is equipped with:

- telephone dialer
- Buzzer
- Gateway (with a web app installed)
- Backup battery

Worker in a production department

If something happens to a worker, can you know it quickly?

If something happens to a worker you can know where it happened?

If something happens to a worker, is it possible to intervene to help it quickly?

A worker operating on a machine in the production department can be in an isolated situation for various reasons



1. shift work, is the only one who works
2. Noisy and extensive department, although not isolated, other colleagues are unable to detect an accident
3. The worker works in a completely isolated area of a plant

Office work

An employee who works in an isolated office or works in a time when no one is present in his office encounters the same issues as all isolated workers.

If something happens to a worker, can you know it quickly?

If something happens to a worker you can know where it happened?

If something happens to a worker, is it possible to intervene to help it quickly?



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Il tutto è superiore alla somma delle sue parti

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