

# THE CHALLENGE OF SOCIAL DISTANCING AT WORK



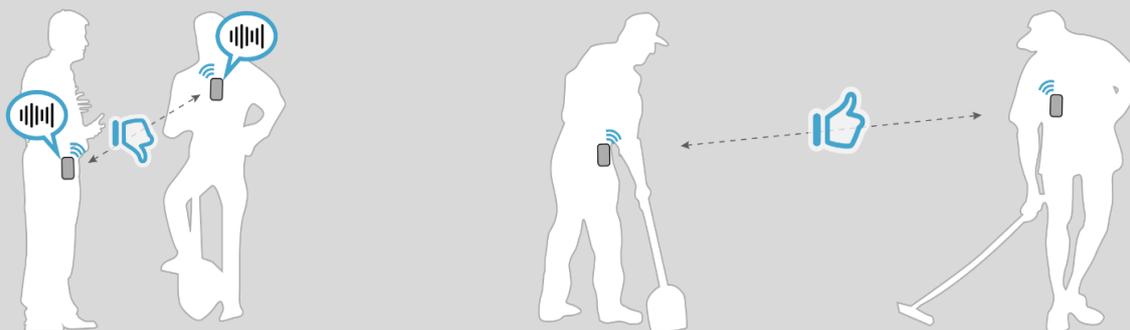
## HOW DO YOU ENSURE SAFE SOCIAL DISTANCING AT WORK?

It is important to provide a safe work environment for your workers in the wake of the COVID-19 epidemic. Recent months have clearly shown that the most vulnerable company assets are also the most important ones. To guarantee the company's continuity not only processes are reviewed, the arrangement of buildings, production and warehouse are also brought back to the drawing board.

It has since become clear that the chance of a second infection wave is steadily increasing. Help your workers to remember to keep their distance. A healthy work environment and guarantee of production continuity is of crucial importance for the individual, the economy and the society.

It is not always easy to monitor the proximity of your colleagues when you are focused on your work. So ProxiPass™ warns the worker immediately whenever he forgets the social distancing rule.

This also gives the company's management team an objective insight of the extent to which the social distancing measures are being respected on the shop floor. That means they can adjust the plans where necessary.



## HOW PROXIPASS™WORKS

Each worker receives a device which he wears around his neck or carries in his trouser pocket while working. These "wearables" are constantly on the lookout for other devices in their neighbourhood. The technology used here is Bluetooth. Once the incoming Bluetooth signal from a nearby device is too strong, the worker is immediately alerted by a buzzer or vibration signal. He is prompted to increase the social distance from his colleagues around him.

This alarm is also sent immediately via a Private LoRaWAN connection to a Gateway. By means of the company network or 4G, this in turn its then sends the alarm on to the ProxiPass™ Cloud application.

## RESTRICTED INFRASTRUCTURE WITH PRIVATE LORAWAN

The ProxiPass™ devices can be used right into the most tucked-away corners of your factory. Once you have connected the LoRaWAN Gateway centrally in the building in your network you can expect a wireless range of up to 500 metres. The range of the LoRaWAN can be measured easily, even in large or complex environments.

- No smartphone needed
- Low battery consumption
- No errors or faulty settings
- Bluetooth technology
- Private LoRaWAN network
- Easy installation
- Proximity insights

## THE PROXIPASS™ APPLICATION

From an intuitive web interface the company manager can easily check the main KPIs for the social distancing rules within the organisation. So, the company receives objective information and can make any necessary adjustments in good time.

Detailed information about the device and the worker is also available. The number and the total duration of the historic contacts between colleagues over a specific period can be easily called up. In case the worker might be infected, this can provide valuable information for the medical officer.

Policies can also be created so that you can also message users by e-mail or text regarding the social distancing rules.

## MORE THAN SOCIAL DISTANCING ALONE

We deliberately chose to monitor the distancing rules by making use of standard hardware devices so that they could also be of use for alternative applications after the COVID-19 pandemic. Applications such as Asset Tracking, Geofencing, Access Control, Call systems, ... are just a few examples that lie within the possibility of the trackers.

The ProxiPass™ application is also only one of the +90 applications offered by Kappa Data on its IoT platform. For example, you can also measure air quality (humidity, CO2, temperature, ...) inside your building. Sufficient ventilation can also drastically reduce the chance of infection. Or do you want to impose a rule that hands must be washed at least four times a day? Energy consumption, Room and Desk Occupation, monitoring your rented parking spaces, watching doors and gates, plus the applications such as access control, Geofencing and Asset Tracking ... All this can easily be added through the Private LoRaWAN network on the application platform.

## THIS IS BELGIAN

ProxiPass™ is the result of a close cooperation between Belgian Technology companies. The application is powered by WMW and the LoRaWAN Gateway is the specialty of Option. Together with the expertise of Kappa Data, a leading Value Add Distributor of IT Security, Networking & IoT solutions, we offer our Partners the possibility of helping Belgian, Dutch and European enterprises in their search for the guarantee of activity continuity and for a healthy work environment.

## STRONG TOGETHER

The worldwide battle against COVID-19 cannot be won through unity alone. It requires a cooperation and joint approach where we engage the responsibility of every individual within the society. Technology can help us in the battle against the pandemic. Together with our Partners and ProxiPass™ we guarantee the continuity of our economy.



## PROXIPASS™ APPLICATION

- ❖ Dashboard with KPIs (proximity)
- ❖ Total number and unique contacts
- ❖ Safe versus unsafe contacts
- ❖ Total duration of unsafe contacts
- ❖ Live and historic display of Proximity events within the organisation or per worker / device
- ❖ Overview list of workers and devices with search and filter function
- ❖ Time, duration and concerned workers/devices per recorded event
- ❖ Detailed display with number and total duration of contacts with colleagues

## APPLICATION PLATFORM

- ❖ Multi-tenant platform
- ❖ +90 applications can be combined
- ❖ User management with user's right
- ❖ Bulk onboarding of workers and devices (upload file or API calls)
- ❖ Widgets and Popups for rapid delivery of the necessary insights and details
- ❖ Map display and ground plan of buildings for specific positioning
- ❖ Management of locations, asset groups and types
- ❖ Setting of specific ruling, alarms and notifications (e-mail, text messages, API, webhooks)

## EXAMPLES OF OTHER APPLICATIONS

- ❖ Air quality
- ❖ Energy management
- ❖ Desk and Room Occupation
- ❖ Cold Chain
- ❖ Parking spaces
- ❖ Track and Trace (indoor and outdoor)
- ❖ Zone Detection
- ❖ Check in - Check out
- ❖ Dynamic Geofencing
- ❖ ...

Your ProxiPass Partner:

# TECHNICAL SPECIFICATIONS OF THE INDIVIDUAL COMPONENTS



## CLOUDGATE LORAWAN GATEWAY

There are two different CloudGate appliances used in our ProxiPass™ offering:

- ❖ CloudGate Ethernet (standard / basic ProxiPass™ Starterkit)
- ❖ CloudGate 4G (advanced ProxiPass™ Starterkit with Ethernet and 4G connectivity)

## CONNECTIVITY

- ❖ 1x 10/100Mbps RJ45 (Cloudgate Ethernet version)
- ❖ 2x 10/100Mbps RJ45 (CloudGate 4G version)

## EXPANSION SLOTS

- ❖ Front: Slot available (Serial, Ethernet, Telematics, Smart Metering, BLE, Developer & Breadboard cards available)
- ❖ Back: Expansion slot pre-loaded with LoRaWAN card

## PRIVATE LORA

- ❖ Processor: Semtech SX1301
- ❖ 868MHz frequency LoRaWAN card included in ProxiPass™ starterkit
- ❖ 9xxMHz frequency LoRaWAN cards optional available
- ❖ Connector: RP-SMA

## POWER INPUT

- ❖ DC input voltage (9-33V DC)
- ❖ DC connector type Micro-Fit 3.0™, Dual row, 4 circuits
- ❖ AC Power Supply + EU plug included in ProxiPass™ starterkit

## PHYSICAL

- ❖ Aluminium housing
- ❖ Dimensions: 115 x 105 x 45mm (excl. SMA connectors)
- ❖ Weight: 304g (CloudGate 4G) & 282g (CloudGate Ethernet)
- ❖ Mounting: Bulkhead: 4x M4 mounting holes (DIN Rail bracket optional available)

## ENVIRONMENTAL

- ❖ Operational Temperature: -30°C - +70°C
- ❖ Humidity: 5% - 95% (non condensing)
- ❖ Storage Temperature: -40°C - +70°C

## CERTIFICATION & COMPLIANCE

- ❖ Certification: CE, FCC, IC (PTCRB - CloudGate 4G only)
- ❖ Compliance : ROHS, Reach

## WARRANTY

- ❖ CloudGate: 5 year
- ❖ LoRaWAN Expansion card: 1 year

## CLOUDGATE 4G SPECIFICATIONS

### WWAN (CloudGate 4G version only)

- ❖ **LTE/3G/2G Radio**
  - LTE Frequency: 700/800/850/900/1800/1900/2100/2600/AWS (B 1-5, 7-8, 13, 17-20)
  - LTE Cat3 Speed: 150Mbps down, 50Mbps up
  - UMTS/HSDPA/HSUPA/HSPA+ Frequency: 850/900/1900/2100/AWS (B 1, 2, 4, 5, 8)
  - GSM/GPRS/EDGE Frequency: 850/900/1800/1900
- ❖ Micro SIM Card (USIM/SIM – Class B & Class C)
- ❖ Antenna connectors
  - 1x SMA: WWAN Main
  - 1x SMA: WWAN Diversity / GPS

## ADDITIONAL SPECIFICATIONS

- ❖ GPS
  - High-sensitive GPS
  - A-GPS / A-GLONASS receiver (SUPL 1.0 & SUPL 2.0)
- ❖ Additional Storage
  - microSD card reader
  - FAT32
- ❖ Power Control – Timed wakeup

## BADGE TRACKER

### BLUETOOTH

- ❖ BLE 5.0
- ❖ Bluetooth line-of-sight distance: 30m/50m
- ❖ ProxiPass™ Accuracy: +/- 1m



### LORAWAN

- ❖ LoRaWAN 1.0.2B
- ❖ Frequency EU868 (ProxiPass™ starterkit) – alternative frequency on request
- ❖ Sensitivity: -142.5dBm (SF12 – 300bps)
- ❖ Communication distance >1.5km in Urban environment (SF12)
- ❖ ProxiPass™ uses SF7 for best airtime result
- ❖ AES128

## BATTERY & POWER CONSUMPTION

- ❖ 600mAh rechargeable battery
- ❖ Micro USB connector (DC 5V)
- ❖ Operating Current: 8mAh (bluetooth receiving) – max 140mA
- ❖ Standby: max. 5 months
- ❖ ProxiPass™ battery lifetime: 1-2 weeks

## LOCAL ALERTING

- ❖ Buzzer (75dB) & Vibration

## DIMENSIONS & ENVIRONMENTAL

- ❖ 97 x 62 x 7mm
- ❖ Operational Temperature: -10°C - +60°C
- ❖ Humidity: 5% - 95% (non condensing)
- ❖ Storage Temperature: -20°C - +85°C

## CERTIFICATION & WARRANTY

- ❖ Certification: CE, FCC, RCM
- ❖ Limited Warranty: 1 jaar

## ORDER INFORMATION

The ProxiPass™ solution consists of hardware components and a licence subscription invoiced on a monthly basis. A project begins with a starter kit. This contains a Private LoRaWAN Gateway to provide your location with the necessary infrastructure. If you have several physical sites where you want to run Proximity Tracing, you simply order more starter kits.

The starter kit comes in two versions: with or without 4G connectivity. If you can easily use the infrastructure of your company network to connect the CloudGate to the Internet then you can go for the standard version. If you want a 4G Internet (failover) connection, or if it is difficult to use the company network, then you might opt for the starter kit with 4G connectivity. However, the kit does not include the SIM card.

Each starter kit comes standard with 10 Badge Trackers. These can be expanded by packs of 10.

All Gateways and Badge Trackers are preconfigured and linked to your personal ProxiPass™ application. So you can get to work immediately. Parameters can be individually adapted using a Smartphone App per badge. Device management can be provided as an option.

### HARDWARE

PROXIPASS-START-LT010	ProxiPass™ starter kit contains a preconfigured LoRaWAN enabled CloudGate (Ethernet only version) and a Pack of 10x BLE/LoRaWAN Badge Trackers with local alerting.
PROXIPASS-START4G-LT010	ProxiPass™ starter kit contains a preconfigured LoRaWAN enabled CloudGate (4G version) and a Pack of 10x BLE/LoRaWAN Badge Trackers with local alerting (SIM card not included)
PROXIPASS-ADD-LT010	Pack of 10 BLE/LoRaWAN Badge Trackers with local alerting, 600mA, micro USB (97x62x7mm)

The ProxiPass™ application is invoiced on a monthly basis and consists of a fixed and a variable component. The variable component depends on the number of Badge Trackers (or other IoT devices) registered on the platform.

### SUBSCRIPTION

PROXIPASS-APP-FIX	ProxiPass™ Cloud Application - Fix monthly fee per End User Account
PROXIPASS-APP-DEVx	ProxiPass™ Monthly Device Fee per Device per End User Account. ("x" identifies the price range, based on the number of devices: 0-99, 100-999, 1000-1999, 2000-9999, ...)

KAPPA DATA IS THE DISTRIBUTOR FOR PROXIPASS™ IN EUROPE. CONTACT KAPPA DATA TO BECOME ONE OF ITS PARTNERS TO COMBAT COVID19



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