



LOC Product Line

LoRaWAN™ /UWB/GNSS Wearable Tracker WearLOC-1

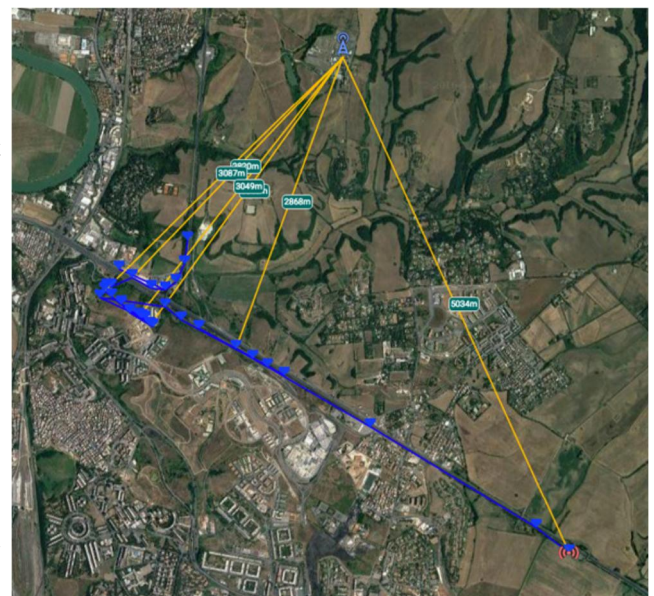


WearLOC-1 is a wearable device for people, asset or vehicle tracking both indoor and outdoor. It is ideally suited to improve safety and security of people, workers, valuable assets and to protect access to sensitive areas.

Its unique combination of sensors allows high precision positioning using GNSS while outdoor, and 2D-3D location by using ProEsys UltraWideBand (UWB) SmartLOC 3D anchor infrastructure when indoor. Tracking data is transmitted in real time using LoRaWAN™ low power long range radio (up to 15Km from gateway) while outdoor, as well as high data rate UWB when indoor. A very low power accelerometer detects motion and triggers tracking and transmission. It can be connected to long-range public or private LoRaWAN networks, including ProEsys gateways and Network Server.

Completely waterproof, WearLOC can be wireless recharged using Qi standard.

WearLOC can be supplied with wrist strap, hanging clip or magnetic holder to fix on metallic surfaces.



FEATURES

State of the Art sensor integration

- GNSS for outdoor location
- UWB for indoor location and data transmission
- LoRaWAN™ for long range data transmission
- Accelerometer
- Wireless Qi battery charger
- Totally sealed, waterproof operation.

Easy installation

Wrist strap, hanging clip or magnetic holder

Operation

Indoor location requires SmartLOC 3D infrastructure

SPECIFICATIONS

Main Control Unit	STM32™ Cortex®-MO+
Power supply	180mAh LiPo battery, wireless Qi compliant charger
Outdoor Location sensor	Low power GNSS with LNA internal antenna
Indoor Location sensor	UltraWideBand with chip antenna operating under SmartLOC 3D infrastructure coverage
LoRaWAN™ RF Module	Semtech® chip based
Operational RF Interface	863 -- 870 MHz LoRaWAN™, 4.5 -- 6.5 GHz UWB
Supported protocol	LoRaWAN™ 1.0
Max TX Power	+14 dBm ERP over LoRaWAN™, -41dbm/MHz over UWB
Status indicator	Power, Radio connection, Battery status
Environmental resistance/Operating temperature	IP67 / -30 to + 70 °C
Power On/off	By external activation with magnet. Totally sealed
Dimensions/Weight	Box 45 x 54 x 17mm / 0.1 Kg

Specifications subject to change without notice



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APPLICATIONS

- Critical Infrastructure monitoring
- Asset or People Tracking
- Restricted Area monitoring
- Security and Safety of workers
- Smart Cities