

LORAWAN® PANIC BUTTON · OUTDOOR SAFETY
WEARABLE

Personnel Tag PT-2-LoRa

A compact LoRaWAN® panic button for outdoor personnel safety. The PT-2-LoRa tracks people via **GPS** and sends one-touch SOS alerts with location to the 4MTracking platform over LoRa — up to **5 km** from the nearest gateway, without any cellular infrastructure.



LORAWAN 1.0.3

UP TO 5 KM

GPS POSITIONING

IP66

SOS PANIC BUTTON

540 MAH RECHARGEABLE

POWERED BY 4MTRACKING

5 km range. Instant SOS. GPS precision.

When the panic button is pressed, the PT-2-LoRa sends an SOS alert with GPS location directly to the 4MTracking platform over LoRaWAN — covering remote sites and outdoor yards without any cellular infrastructure.



Technical Specifications

LoRaWAN V1.0.3 panic button with GPS positioning and rechargeable battery.

Specification	Personnel Tag PT-2-LoRa
LORA WIRELESS	
Protocol	LoRaWAN® V1.0.3
Frequency bands	EU868 · AU915 · US915 · AS923 CN470 · IN865 · KR920 · EU433 · CN779
Max TX power	20 dBm
Sensitivity	−140 dBm @ SF12 / 300 bps
Range*	Up to 5 km (urban open space)
POSITIONING	
GPS	GNSS — meter-level accuracy
HARDWARE	
Dimensions	73 × 40 × 17 mm
Weight	48 g (±2 g)
Material	ABS/PC + TPU
Sensors	3-axis accelerometer · vibration motor
POWER	
Battery	540 mAh lithium, rechargeable (USB)
Runtime	Approx. 2 months
Operating current	< 260 mA
ENVIRONMENT	
Charging temperature	0 °C ... +45 °C
Discharge temperature	−10 °C ... +60 °C
IP rating	IP66
Certifications	FCC · CE



Compact wearable design. At 73 × 40 × 17 mm and 48 g, the PT-2-LoRa clips to a belt, harness or lanyard for all-day wear.

*Range measured in open urban area with no obstacles. Actual range depends on environment, antenna gain and LoRaWAN gateway placement.

Key Features

Long-range LoRa connectivity with GPS positioning for outdoor personnel safety.

5 km LoRa range — LoRaWAN V1.0.3 reaches up to 5 km from the nearest gateway without any cellular or Wi-Fi infrastructure.

GPS positioning — GNSS tracking delivers meter-level accuracy for personnel location across outdoor sites and remote areas.

One-touch SOS panic button — instantly triggers a geo-tagged distress alert to the 4MTracking platform with current position.

Vibration feedback — silent vibration motor confirms alert receipt, button presses and status changes without noise.

Motion & man-down detection — 3-axis accelerometer detects falls, prolonged stillness and abnormal movement patterns.

Rechargeable + OTA updates — 540 mAh USB-rechargeable battery; firmware updated over-the-air for zero-downtime maintenance.

APPLICATIONS

• Mining & Remote Sites

Personnel safety tracking across remote outdoor worksites and underground portals without infrastructure dependency.

• Lone Worker Protection

Real-time location and instant SOS for field operatives, security guards and maintenance crews working in isolation.

• Construction & Outdoor Yards

Geo-fencing, emergency mustering and zone breach alerts across large outdoor construction and industrial sites.

• Outdoor Events & Crowd Safety

Emergency response coordination and steward positioning over wide event areas via LoRaWAN gateways.