

SEAL Ex Wearable GPS Tracker

ATEX Rated LoRaWAN® connected GPS Tracker for Locating Personnel

SEAL Ex is an ideal solution for tracking your personnel working remotely in the field in difficult RF environments requiring ATEX Zone 1 certification where combustible gases, vapors or dusts may be present. The rugged IP67 rated and ATEX Zone 1 certified sensor is designed for the most demanding installations, with an operating temperature range of -20 to +60 °C. SEAL Ex Provides up to 11 months of battery life. SEAL Ex is designed with fall and impact detection for enhanced worker safety. The SEAL Ex wearable Tracker seamlessly integrated with TEKTELIC's End IoT solution.



Technical and Functional System Specifications

General System Parameters

Operational Temperature	-20°C to +60°C
Protection Rating	IP67
Size without safety clip*	104 x 70 x 34 mm
Size with safety clip*	104 x 70 x 56 mm
Battery	2x AA Batteries
Battery Life	11 months

LoRa Parameters

RF Power	15 dBm
RF Sensitivity	-137dBm (SF12, 125kHz)
ISM Band	All Global ISM Bands
Antenna	Internal
LoRa Device Class	Class A

GNSS Features

Position Accuracy	5 m
TIFF (Time to First Fix)	Cold Start - 26 Seconds
	Hot Start - 1 Second
Sensitivity	-164 dBm tracking and navigation
	-160 dBm reacquisition
	-148 dBm cold start
	-157 dBm hot start

Key Features

- » Fall Detection
- » Elevation Detection
- » Optional Harness Detection
- » Precise GPS & Integrated BLE
- » GNSS Datalogging
- » ATEX Zone 1 Certification
- » Data Transmission over LoRaWAN®
- » Event-Based Startup
- » Geofencing Capabilities
- » Audio & Visual Alarms
- » 11 Months Battery Life
- » Rugged IP67 Design

Regulatory Compliance

Safety	(CE) EN IEC 62368-1:2020 (Ed. 3)
Regulatory	ETSI EN 300 220 – 1/2
	ETSI EN 301-489-1
ATEX Specification	EN IEC 60079-0:2018 (Ed. 7.0)
	EN 60079-11-2012 (Ed. 6.0)
ATEX Marking	Ex II 2G Ex ia IIC T4 Gb
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