

# SPURO-X Technical Specifications





## LoRaWAN General Purpose Tracker

SPURO®-X a high-end tracking device with a unique design that enables several mounting options. The development has been done in cooperation with Quectel to ensure best possible tracking performance and ultra-low power consumption. Since the device is built for harsh environments with IP67 rating and a replaceable battery this makes SPURO®-X able to be in operation for many years.

Combined with VestiTechs software its developed to provide services for a variety of industries. This makes SPURO®-X the leading and true multi-purpose device.

## VestiTech

VestiTech has more than 30 years' experience of embedded software to build advanced services. The company operated a LoRa network as early as 2010 for tracking Reindeers in the North of Sweden and has since then continued to develop solutions for track and trace. A unique hardware tracker platform SPURO® has been developed together with a state of the art Cloud based service platform to address various business applications.

## **Products highlights**

LoRaWAN® with global frequency support with NFC technology for easy deployment and commissioning. Multi sensors: GPS, Temperature and Tri-axial accelerometer adds business value.

Simple configuration and firmware updating using mobile application and NFC.

Data retrieval over LoRaWAN or NFC.

Built-in memory to store collected data - no LoRaWAN network access dependency.

Designed for low energy consumption with longlasting battery lifetime.

Unique battery compartment design enables quick battery change.

Small form factor with re-enforced cover and low weight.

Encapsulated to uphold water resistance to IP67.

High end materials tested to withstand battering, UV radiation and extreme temperatures.



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# Main Specifications

Connectivity	LoRaWAN, NFC
Main Chip	ARM Cortex - M4
Memory	256 kB + 16 Mb
Power	Max 3,6 V Min 3,1V
Battery	SAFT LS 14500 or equal
Battery Type	Lithium Thionyl Chloride
Battery Lifetime	> 5 years
Antenna	LoRaWAN, GPS and NFC
Size	62 mm x 66 mm x 22 mm
Weight	55 g
Operating temperature	-20 to +85 °C

# Standards and certifications

Certifications	CE, FCC, RoHS
Protection Rating	IP67

#### Warranty

Warranty

1-Year warranty

# LoRaWAN

Antenna	Internal
ISM Band	EU868 and US915
Rx Sensitivity	-137 dBm
Max RF output	+14 dBm
LoRa Device Class	А
LoRaWAN Specification	1.0.4 compliant

### GPS

GPS	GPS/GLONASS/Galileo/ BeiDou/QZSS
Position accuracy	2,5 meters
Time to first fix	35 seconds
Sensitivity	Tracking: -165 dBm
Assisted GPS	Yes

## Accelerometer

Sensor element	Tri-axial
Measurement range	±2g/4g/8g/16g
Sensor identifier	MC3635
Sample Rate	14 -1300 samples/sec