lightricity

4EverTrack – Datasheet

Description

The 4EverTrack is an ultra-low power autonomous BLE sensing and tracking hardware platform powered by photovoltaic energy harvesting. 4EverTrack can be used to wirelessly monitor the location, temperature and movements of assets.
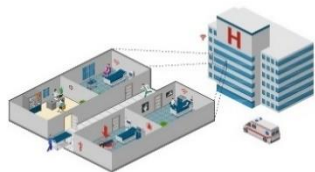
Features

- Sustainable solution, powered by indoor PV – eliminate the battery
- Compatible with a wide range of real-time location (RTLS) systems
- Customisable with a wide range of sensors for maintenance-free asset monitoring
- High IP rating for industrial use

Application Examples

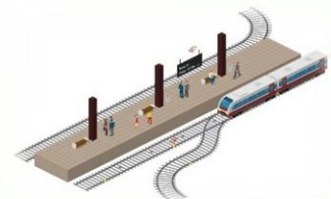Asset Tracking & Monitoring

Location Tracking

Room Control

Animal Tracking

Infrastructure Monitoring

Trains and Transportation

Electrical and Advertising Specifications

Processor	ARM® Cortex™-M4 CPU
Security	128-bit AES HW encryption
Operating Temperature	-40 °C to +85 °C
Minimum operating conditions	80 lux with EXL5050/25 mm² PV 100 lux with EXL3535/10 mm² PV
Wireless communication protocol	BLE5.0, iBeacon or proprietary
TX power	-20 to +4 dBm in 4 dB steps, 0 dBm by default
Bluetooth range	Up to 100 m (LoS), 20m typical
Advertising period	1s to 5min (depending on ambient light level)
Sensing options	Temperature, light, humidity, pressure, sound, accelerometer, magnetometer

Mechanical Specifications

Enclosure dimensions	59 mm x 34 mm x 8 mm
IP rating	IP67
Enclosure colour	Transparent and white

Usage Example