LoRa®

LoRa Edge™
Multi-technology Platform for IoT

SEMTECH
LR1110

INDOOR AND OUTDOOR SINGLE BASED SOLUTION FOR ASSET MANAGEMENT APPLICATIONS

The first platform of the LoRa Edge portfolio (LR1110) is the most affordable and simplified asset management platform that will enable a wide portfolio of applications for indoor and outdoor asset management, targeting industrial, building, home, agriculture, transportation, and logistics markets.

The first product from this portfolio is an asset management solution that revolutionizes the development of Internet of Things (IoT) devices for asset management applications, featuring low power Wi-Fi and GNSS sniffing capabilities combined with simple to use and cost effective LoRa Cloud™ geolocation and device management services to significantly reduce the cost and complexity of locating and monitoring IoT assets.

SEMTECH

LoRa Edge datasheet is available for download at semtech.com
Training and support documentation for the LoRa Edge is available at LoRa-developers.semtech.com

LoRa Edge™   Semtech Multi-technology Platform for IoT

Key Product Features
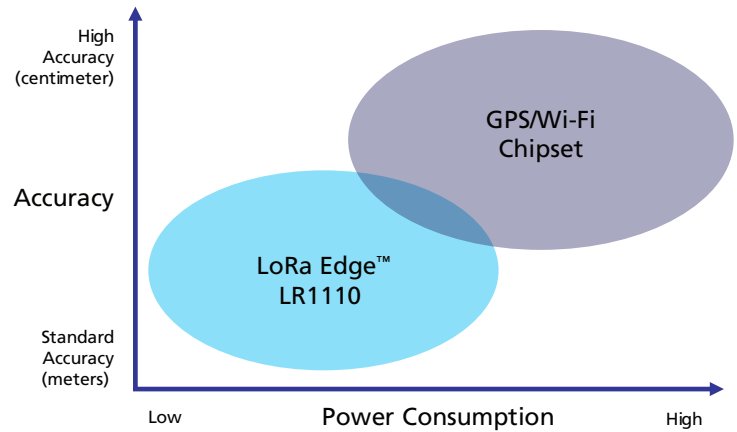
Multi-Purpose Radio Front-End

- 150 - 2700MHz continuous frequency synthesizer range
- GPS/BeiDou scanning
- Wi-Fi passive scanning

Low-Power LoRa®/(G)FSK RF Transceiver

- Worldwide frequency bands support in the range 150 – 960MHz
- High power PA path +22dBm
- High efficiency PA path +15dBm
- Fully compatible with the LoRaWAN® standard

Cryptographic Engine

- Hardware support for AES-128 encryption/decryption based algorithms
- Handling device parameters such as DevEUI and JoinEUI
- Protects confidential information such as encryption keys
- Stores NwkKey, AppKey as defined in the LoRaWAN standard

High Accuracy (centimeter)

Accuracy

Standard Accuracy (meters)

GPS/Wi-Fi Chipset

LoRa Edge™ LR1110

Low   Power Consumption   High

Key Benefits

- Enable companies to develop affordable asset management solutions with the best battery life and end-to-end robust security

- Provides a single based solution to develop asset management applications for indoor and outdoor

- Enables customer to balance performance, location, accuracy, and low power which is crucial since majority of asset management applications are battery operated and replacing batteries can be costly

- Reduces the bill of materials (BOM) by integrating GNSS, Wi-Fi and a LoRa transceiver in a single chip solution to enable indoor and outdoor applications

- Enables customers to develop lower power consumption solutions, about 10x lower than existing solutions

- LoRa Edge is pre-provisioned with security keys using a highly secure hardware module, therefore customers do not have to implement costly secure process or additional cost in secure hardware

SEMTECH

semtech.com/LoRa