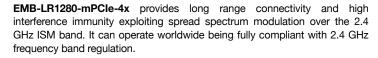
EMB-LR1280-mPCle-4x

2.4 GHz mini PCI express multichannel LoRa® card



EMB-LR1280-mPCle-4x exploits 4 Semtech SX1280 radio transceivers to offer 3 dedicated channels for reception and 1 for transmission. It allows simultaneous reception of 3 LoRa® channels with programmable data rate and it is able to achieve a sensitivity up to -129 dBm. One Semtech SX1280 is dedicated to transmission, capable of achieving RF output power of +12 dBm. Thanks to the intrinsic resilience of LoRa® modulation, the EMB-LR1280-mPCle can operate in hostile RF environments coexisting with other widespread technologies like Wi-Fi and Bluetooth®.

EMB-LR1280-mPCle-4x acts as Gateway in every star topology network which uses LoRa® 2.4 GHz modulation, deploying connectivity and services. The LoRa® modulation properties and 2.4 GHz regulation make the **EMB-LR1280-mPCle-4x** the perfect solution for numerous worldwide applications that require a LoRa® Gateway such as:

- Logistic and Supply Chain
- Industrial Monitoring and Control
- Factory Automation
- Home and Building Automation
- Wireless Alarm and Security System

Highlights:

- Long range connectivity using ultra-long range spread spectrum communication and high interference immunity on the 868/915 MHz radio band;
- 3 LoRa® simultaneous channels in the 2.4 GHz frequency
- High sensitivity up to -129 dBm and a RF output power up to +12 dBm



Technical Specifications

Chipset	Semtech SX1280
External Antenna	U.FL connector
Modulation	LoRa® Spread Spectrum
Operating Frequency	2.4 GHz ISM band
Frequency Range	2400 ÷ 2500 MHz
Operating temperature	-40°C to +85°C
RF Output Power	Up to 12 dBm
Operating Voltage	+3.3V
Current consumption	Tx: Max. 84mA @ +12dBm; Rx: 30mA
Interfaces	Standard mPCle connector
Sensitivity	-129 dBm @ SF12 BW 812.5kHz
Dimension	50.95×30×1 mm
Features	3 LoRa® Rx Channels + 1 LoRa® Tx Channel
Ordering Information	EMB-LR1280-mPCle-4x







