EMB-LR1301-mPCIe 868/915 MHz

mini PCI express multichannel LoRaWAN board

technical specifications

Operating Voltage	+5V
Current Consumption	
Modulation	LoRa® Spread Spectrum, FSK, GFSK
Operating Frequency	868MHz (EU) / 915MHz (US)
Frequency Range	860MHz to 1020MHz
Operating Temperature	-40°C to +85°C
RF Output Power	Up to 27dBm
Interfaces	mPCle (SPI / I2C / UART / GPIOs)
Sensitivity	Up to -137dBm
Dimension	71x40x1 mm
Weight	
Features	Listen Before Talk (LBT) Capability GPS On-board uFL antenna conector 8 LoRa Channels FPGA version supports LoRa Spectral Scan
Part Numbers	

EMB-LR1301-mPCle provides long range connectivity using ultra-long range spread spectrum communication and high interference immunity on the 868/915 MHz radio bands. It increases operational capacity keeping the gateway cost low.

EMB-LR1301-mPCle offers up to 8 LoRa Channels in the 868Mhz frequency allowing it to receive up to 8 LoRa packets simultaneously and it is able to achieve a sensitivity of -137dBm and a RF output power of +27dBm making it the ideal device to use in LoRa gateways applications.

EMB-LR1301-mPCle has also the Listen Before Talk (LBT) capability giving to the user to share the same channel. When enabled, the device monitors channels continuously and transmit only if the channel is free. It includes as well a GPS module.

EMB-LR1301-mPCle can be used in several application where LoRa gateway is needed, such as: Internet Of Things (IOT), Automated Meter Reading, Smart Cities, Home and Building Automation, Wireless Alarm and Security System, Machine to Machine (M2M), Industrial Monitoring and Control, Long Range Irrigation System.



41122 - Modena (Italy) Via Emilia Est, 911 tel. +39 059 371714 fax: +39 059 3680498 www.embit.eu - info@embit.eu