4G LTE Indoor Pico Gateway

⚠ Features

- Compliance to LoRaWAN 1.0.3
- Up to 16 concurrent channels for LoRa transmission
- Optional support a wide frequency range from 862MHz to 928MHz in different SKU *see specification below for more details
- Support Listen Before Talk for downlink
- Support background scan
- Various Internet connection: Ethernet or 3G/4G backhaul
- Web UI for LoRa and network configuration
- Cloud service for gateway health monitoring
- Support OTA and USB firmware upgrade

Browan has been instrumental in the development of LPWAN system solutions and is an early provider of LoRaWAN protocol-based, end-to-end LPWAN solutions. The LoRaWAN technology is designed to connect low-cost, battery-operated sensors over long distances in harsh environments that were previously too challenging or cost-prohibitive to connect. Because of its long range, high penetration and high sensitivity capabilities, it is a much more cost-effective way for service providers to deploy LoRaWAN network for sensor applications in vertical market domain.

The Pico Gateway is specifically designed for wide area IoT applications. Applications include, but not limited to home security, automatic meter reading, monitoring fault indicators, monitoring street lights, etc. Typical deployment is using star network configuration similar to mobile network base station. This gateway is Pico type and very suitable for small business or private area use case like parking space, exhibition center or campus etc.

Specification

Model Name	WRTM-326ACN
Frequency Band	EU 863~870 MHz / US 902~928 MHz / India 865~867 MHz / AS 923 MHz / AU862~870 / CN470~510
Number of Channels	Up to 16 concurrent channels for LoRa transmission
4G Module	Quectel PCIe module
WAN Protocol	LoRaWAN
Modulation	Based on LoRaWAN
RF Transceiver	SX1301 or SX1308 with SX1257 (additional SX1276 for LBT and background scan)
Transmit RF Power	0.5W (up to 27 dBm)
Receive Sensitivity	Down to -142 dBm
Operating Temperature	0oC ~ 40oC
Storage Temperature	-10oC ~ 60oC
Power Supply	DC 12V/2A
Antenna Type	2 external LoRa antennas & 2 external 4G antennas

4G LTE Indoor Pico Gateway

Specification (continues)

Interfaces	1 WAN RJ45 10/100Mbps, reset button, USB 2.0, DC jack in, and 4 LED indicators
Dimensions	L:195 x W:165 x H:35mm
Weight	0.91 kg
Security	AES 128
Type Approval	CE

SKU Detail

SKU	Country	Channels	Frequency Band (MHz)	3G/4G Support	3G/4G Module
AU-16	Australia	16	AU920 (915~928)	N	N
AU-16-M	Australia	16	AU920 (915~928)	Y	EC25-AU
CN-470-8	China	8	CN470 (470~510)	N	N
CN-470-8-M	China	8	CN470 (470~510)	Y	EC20-CE
EU-8	Europe	8	EU868 (862~870)	N	N
EU-8-M	Europe	8	EU868 (862~870)	Y	EC25-E
JP-16	Japan	16	920~928	N	N
JP-16-M	Japan	16	920~928	Y	EC25-J
TW-16	Taiwan	16	920~925	N	N
TW-16-M	Taiwan	16	920~925	Y	EC25-AU
US-16	USA	16	US915 (902~928)	N	N
US-16-M	USA	16	US915 (902~928)	Y	EC25-A

* Samples are also available for India 865~867 MHz.

3G/4G Band Support

3G/4G Module	EC25-E	EC25-J	EC25-A	EC25-AU	EC20-CE
Countries	Europe Malaysia	Japan	USA	Australia Taiwan	China
LTE FDD	B1/B3/B5/B7/B8/ B20	B1/B3/B5/B8/B18 / B19/B26	B2/B4/B12	B1/B2/B3/B4 B5/B7/B8/B28	B1/B3/B8
LTE TDD	B28/B40/B41	B41	X	B40	B38/B39/B40/B41
WCDMA	B1/B5/B8	B1/B6/B8/B19	B2/B4/B5	B1/B2/B5/B8	B1/B8
GSM	B3/B8	X	X	B2/B3/B5/B8	900/1800
TDSCDMA	X	X	X	X	B34/B39
CDMA 1x/EVDO	X	X	X	X	BC0