Outdoor Micro Gateway

Features

- Compliance with LoRaWAN 1.0.3
- Up to 16 concurrent channels
- 3G/4G backhaul supported
- Optional support a wide frequency range from 470MHz to 928MHz in different SKU *see specification below for more details
- Long range over 15 kilometers radius
- 1 LAN port (10/100Mbps) with PoE
- Downlink LBT
- Support background scan
- Cloud service to support easy deployment
- Provides full redundancy coverage
- IP67 waterproof

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 tracking applications than to use GPRS network.

The Micro Gateway is specifically designed for wide area smart city applications. Applications include, but not limited to automatic meter reading, monitoring fault indicators, monitoring street lights, etc. Typical deployment is using star network configuration similar to mobile network base station. This product can be configured as last mile repeater to solve sensor connectivity issue when sensor is located at edge of the coverage or out of coverage. It's a cost-effective way to provide full redundancy coverage for the entire service area.

Specification

Model Name	WAPS-232N
Frequency Band	EU 863~870 MHz / US 902~928 MHz / India 865~867 MHz / AS 923 MHz / CN 470~510 MHz / AU915~928 MHz
Number of Channels	Up to 16 Channels
WAN Protocol	LoRAWAN
Modulation	Based on LoRaWAN
RF Transceiver	SX1301 with SX1257
Transmit RF Power	0.5W (up to 27 dBm)
Receive Sensitivity	Down to -142 dBm
Operating Temperature	-20ºC ~ 60ºC
Power Supply	55VDC/0.6A via PoE adapter (Onsemi PD-9001GR 802.11at)
Antenna Type	External N-Type antenna
Ingress Protection	IP67

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Specification (continues)

Interfaces	1 LAN port, 2 LoRa antenna connectors, 1 GPS antenna connector, One (1) 3G/4G antenna (option)
Dimensions	L:230 x W:200 x H:66 mm
Weight	2.05 kg
Security	AES 128
Type Approval	FCC/CE/NCC/SRRC/TELEC
Surge	6 KV surge at Ethernet RJ45 Port

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
MY-16	Malaysia	16	919~923	N	N
MY-16-M	Malaysia	16	919~923	Y	EC25-E
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

* Sample 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

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