FlatMesh™

Product Data Sheet: FlatMesh USB Gateway

The FlatMesh USB Gateway provides all the functionality required to operate a FlatMesh wireless sensor network in conjunction with a PC.

Combine with the FlatMesh Data Logger software for simple text file logging for local deployments without the need for access to the internet.

Key features

- On-board industrial-grade flash memory card for data buffering and backup
- No separate power connection required
- Robust USB connector to avoid accidental disconnection
- Firmware is upgradeable over USB

FlatMesh USB Gateway

Physical Specifications

Parameter	Value
Dimensions	125 x 66 x 41 mm
Total Mass	0.35 kg (approx.)
Housing Material	Die cast aluminium enclosure Metallised plastic USB connection
Mounting Options	35 mm DIN rail
Operating Temperature Range	-40°C to +85°C

FlatMesh Radio Specifications

Parameter	Value
Communication Type	Proprietary FlatMesh v3 Mesh Networking Protocols IEEE 802.15.4 compliant
Frequency Band	2400 – 2485 MHz ISM Band
Maximum Transmit Power	6.2 dBm (EN 300 328 v2.2.2)
Maximum Permitted Antenna Gain	4 dBi
Range	Up to 300 m depending on the environment and fitted antenna Consult with Senceive for your application
Maximum Network Size	Typically up to 100 nodes Consult with Senceive to determine optimal system configuration
RF Module	Senceive FM3Gateway

FlatMesh USB Gateway

USB Interface

Parameter	Value
Standard	USB 2.0
Connector Type	Standard A Plug
Cable Length	1 metre
Type of Device	Virtual COM Port
Power Requirement	5 V, 500 mA max.

Certifications

- Tested to conformity with all the essential requirements of the Radio Equipment Directive 2014/53/EU and RoHS Directive 2011/65/EU
- Network Rail Acceptance PA05/04146
- London Underground Approved

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Ordering Information and Accessories

Model	Description
FM3G-USB	**FlatMesh 3 USB Gateway**
FA-FM-ADJ	**Adjustable angle antenna** Flexible installation, perfect for use in tunnels and indoor environments Maximum gain +2 dBi
FA-FM-WPS	**Waterproof straight antenna** Maximum gain +1.1 dBi