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 or the FlatMesh Web Monitor software for real-time visualisation and alerting.

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

Physical Specifications

Parameter	Value
Dimensions	125 x 66 x 41mm
Total Mass	0.35 kg (approx.)
Housing Material	Die cast aluminium enclosure Metallised plastic USB connection
Mounting Options	35mm 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 (EN 300 328 v1.8.1)	6.2dBm
Maximum Antenna Gain	4dBi
Range	Up to 300m depending on the environment Consult with Senceive for your application
Maximum Network Size	Typically, up to 100 nodes Consult with Senceive to determine the optimal system configuration
RF Module	Senceive FM3Gateway

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	5V, 500mA max.

Certifications

- Tested to conformity with all the essential requirements of Radio Equipment Directive 2014/53/EU and RoHS Directive 2011/65/EU

- Network Rail Acceptance PA05/04146

- London Underground Approved

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 +2dBi
FA-FM-WPS	**Waterproof straight antenna** Maximum gain +1.1dBi