

Multi Networking Gateway Processor

Mesh Hub™



Product Code: FC-FMH01

WIDE COVERAGE MESH GATEWAY FOR FOOTFALLCAM DEVICES

- Multiple variants (Bluetooth, LoRa, RS485, 4G with GPS)
 It acts as Hub and Gateway to extend the coverage
- Act as a primary gateway to allow data to be sent from 200 FootfallCam™ IoT devices to the cloud solution.
- Coverage area up to 50m in radius without a direct line of sight for BLE connected devices.
- Excellent Lifespan MBTF 25 years

EASY TO INSTALL AND SET UP

- Daisy chain with RS485 Connectivity and DC power (5 cores)
- More Compact Form Factor
- 1-year Manufacturer Warranty

VARIANT SPECIFICATION

4G with GPS	GPS Accuracy (m)	± 5
	GPS Update Frequency (s)	5
	GPS Delay	< 5
	Recommended data plan 1Gb/month	
LoRa	Range	~1.5 km*
	Frequency Band	AS923, EU868, US915
	Data Rate	~ 5kbps*
Ethernet	Speed	10/100Mbps
	Cabling	Cat5/Cat6

^{*}Calculated with these parameters: TX Power 14 dBm, 923 MHz, Spreading Factor 7, Bandwidth 125kHz, Preamble Length of 8, enabling Header and CRC. Calculator used:

 $\underline{https://lora-developers.semtech.com/build/tools/calculator}$

TECHNICAL DATA

Device Dimension (mm)	146 (W) x 52 (D) x 27 (H)
Packing Dimension (mm)	160 (W) x 80 (D) x 35 (H)
Weight	Device: 0.4 kg Packing: 0.85 kg
Indicator	LED status indicator
Casing	Made of ASA plastic, shock
	absorption and dust resistance
Storage	Built-in, 16MB Storage
IP Rating	IP52 Splash proof
Operating Environment	Temperature 10°C to 45°C, Humidity 10% to 90%
Storage Environment	Temperature -40°C to 80°C, Humidity 10% to 95%
Wireless Connectivity	Bluetooth 5.3 with Mesh Topology; AES-128 Encryption; +4 dBm TX Power; Supports a network of up to with 20 concurrent
Wire connectivities	Ethernet: 100 Mbps; RS485 (Half Duplex) up to 200
Field Upgradable	Manual / Auto Software upgrade
Power Over Ethernet	Yes (IEEE802.3af)
PoE Mode	Mode A/B
Power Input	POE 48-56 VDC or DC12V
Power Consumption	Average 6 W
Origin	Made in the UK

FIRMWARE SPECIFICATION FOR DEVICE LEVEL

Interface	Http; Https
User Levels	2 levels: Administrator,
	Standard User
Operating System	Footfall Counter OS
Ethernet	10/100 Mb Ethernet
Data Delivery	TCP/IP
Database Type	SQLite
Report Format	csv, .xml, .txt
Data Storage on counter level	Hourly Data: 300 days; Raw Data: 7 days; 3 days *Data which has sent to server will keep permanently in server level
Data Backup	Yes
Firmware Feature	Secure Operating System with Multicore Processor, Adaptive IR based on Lighting Conditions, Device Health Check, Built-in External Watchdog
Data Upload to Server	Every Hour
Average Data Transfer Rate*	10.0 kilobytes/hour

^{*}Average Data Transfer Rate is measured with a predefined sample size of 20 requests per hour

PRODUCT DIMENSION

