

TinyGateway PoE Outdoor Wirepas Bluetooth Low Energy gateway

Data sheet



Key features

- Low-power and low-cost outdoor gateway
- Ethernet connectivity based on ESP32 SoC (IEEE 802.3af)
- Wirepas Sink based on Nordic nRF52832
- Compliant with Wirepas remote MQTT(S) APIs
- Compact robust IP65 enclosure
- RJ45 PoE power-supply connector

Key features

Outdoor rugged low-power Wirepas gateway with Ethernet (PoE) connectivity with full support of Wirepas gateway drivers for MQTT connection

Supported Wirepas stack: 5.x (up to 5.3)

Operating modes: Wirepas Sink device

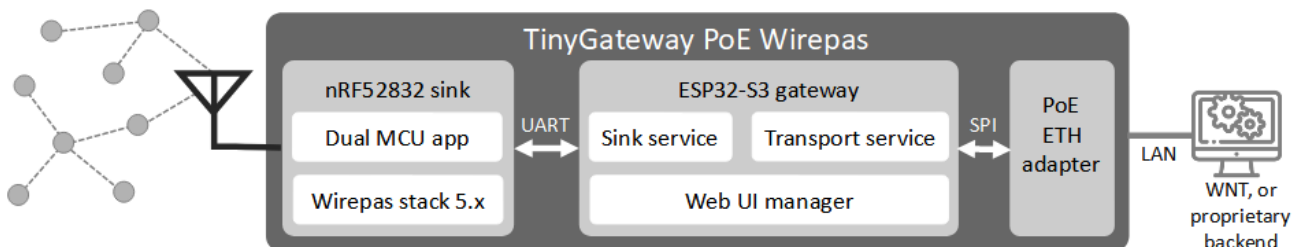
Network interface: Ethernet PoE 802.3af

Compatible with MeshCube, Wirepas NMS or with custom back-end, cloud or on-premises

Fully compliant with Wirepas remote MQTT(S) APIs

Web UI manager dashboard and HTTP APIs for configuration and management

TinyGateway PoE Outdoor Wirepas: architecture and interfaces



Device specifications	
Hardware specifications	
Platform	Espressif Systems ESP32S3WROOM-1
Processor	ESP32-S3 series, Xtensa® dual-core 32-bit LX7 microprocessor, up to 240MHz
Memory	384 KB ROM, 512 KB SRAM, Up to 8 MB PSRAM
Connectivity	Ethernet (802.3af), Wirepas Mesh 2.4GHz (v5.x)
User interfaces	Power-on LED, Wirepas LED, Status LED, factory-reset button (internal)
Ethernet specifications	
Protocol	IEEE 802.3af
Connector	RJ45
Wirepas Mesh specifications	
Core module	Nordic Semiconductor nRF52832 SoC, 32-bit ARM Cortex-M4
Protocol	Wirepas Mesh 2.4GHz, v5.x (up to 5.3)
Frequency band	2.402 to 2.480 GHz
Channel spacing	2 MHz
Sensitivity	-96 dBm
TX power	4dBm (max)
Antenna type	Planar Inverted F-antenna
Antenna gain	2dBi
Power supply	
Power voltage	44 – 57Vdc (PoE Class 0)
Power connector	IP rated RJ45 connector (cable gland option on demand)
Current	40 mA typ. @48Vdc; 60mA max @48Vdc
Mechanical specifications	
Material	UV-protected Polystyrene (PS) Plastic
Color	Light grey
Size	185 x 185 x 65 mm
Weight	500 gr
Protection	IP65
Assembly	4x screws on back panel
Mounting options	Pole mounting kit included
Environmental specifications	
Operating temperature	-20°C to +65°C
Storage temperature	-40°C to +85°C
Certifications	
CE (RED), FCC	

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