

TinyGateway PoE Wirepas

Wirepas Mesh 2.4GHz gateway

Data sheet



Key features

- Low-power and low-cost Wirepas gateway
- Ethernet connectivity based on ESP32 SoC (IEEE 802.3af)
- Wirepas Sink based on Nordic nRF52832
- Compliant with Wirepas remote MQTT(S) APIs
- Compact light-weight plastic enclosure
- Dual power-supply: USB-C or RJ45 PoE connector

Key features

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

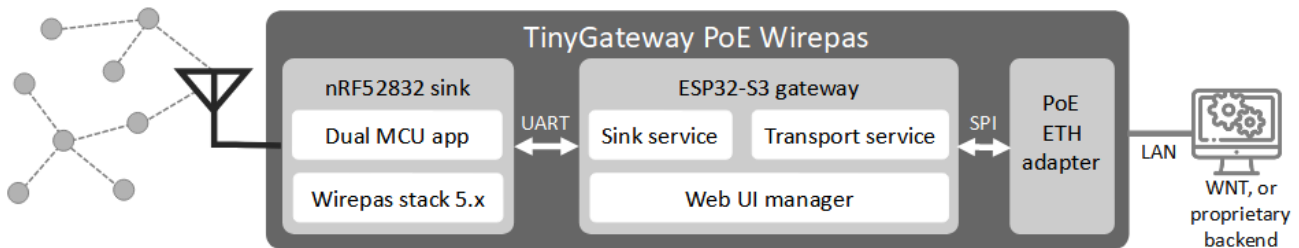
Network interface: Ethernet 802.3af

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 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, up to 8MB Flash
Connectivity	Ethernet (802.3af), Wirepas Mesh 2.4GHz
User interfaces	Power-on LED, Wirepas LED, Status LED, factory-reset button



BlueUp S.r.l.
Loc. Belvedere, Ingresso 2, 99, 53034 Colle di Val d'Elsa (SI), ITALY
Tel. +39 344 2030929, Fax +39 0577 043101
E-mail: info@blueupbeacons.com, Web: www.blueupbeacons.com
P.IVA/CF/N. iscr. CCIAA (SI). 01373980521, VAT: IT01373980521

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	• USB: 5Vdc • PoE (802.3af): 44 – 57Vdc (PoE Class 0)
Power connector	• USB: USB-C connector • PoE (802.3af): RJ45 connector
Current	• USB: max 250 mA @5Vdc • PoE (802.3af): 40 mA typ. @48Vdc, 60mA max @48Vdc
Mechanical specifications	
Material	Recyclable ABS plastic (flame-resistant UL94V-0)
Color	White
Size	124 x 100 x 35 mm (including flanges)
Weight	200 gr (including flanges)
Protection	IP40
Opening	4x M2.5 self-healing screws on back panel
Wall fastening	2x M3.5 screws (not included) for lateral wall-mounting flanges
Environmental specifications	
Operating temperature	-20°C to +65°C
Storage temperature	-40°C to +85°C
Certifications	
CE (RED), FCC	

BlueUp reserves the right to change product specifications at any time without prior notice.
Wirepas, Espressif Systems, Xtensa, Nordic Semiconductor are trademarks of respective owners