


TinyGateway PoE Wirepas Wirepas Mesh 2.4GHz gateway

Data sheet

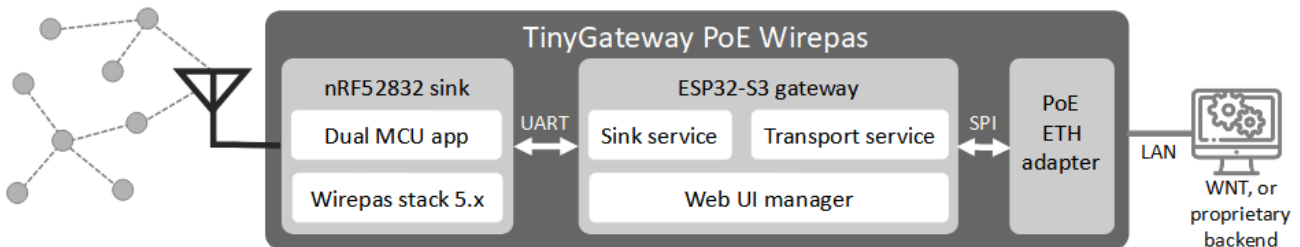


Key features

- Low-power and low-cost Wirepas gateway
- Ethernet connectivity based on ESP32 SoC (IEEE 802.3af)
- Wirepas Sink based on Nordic nRF52832
- Network communication protocols: HTTP, MQTT, UDP, TCP
- Compact light-weight plastic enclosure
- Power-supply: USB-C 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 Wirepas Network Tool (WNT) backend or with custom back-end, cloud or on-premises
Fully compliant with Wirepas remote MQTT 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
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	<ul style="list-style-type: none"> • USB: 5Vdc • PoE: 44 – 57Vdc
Power connector	<ul style="list-style-type: none"> • USB: USB-C connector • PoE: RJ45 connector
Current	250 mA @5Vdc USB (max)
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	-40°C to +65°C
Storage temperature	-40°C to +105°C

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