

TECHNICAL SPECIFICATIONS

Physical Characteristics

- **Dimensions:** 195 × 184 × 48.5 mm (L x W x H)
- **Weight:** 470 g (without antenna)
- **Power supply connector type:** barrel
- **Mounting:** Electronics enclosure provides screw holes for wall mounting
- **Antenna connector type:** SMA
- **RS-485 connector type:** Screw terminal
- Two USB ports
- Two Ethernet ports

Electrical Characteristics

- **Power supply input:** 100-240 VAC, 50/60 Hz, 1.4 A
- **Power supply output:** 24 VDC, 2.5 A, 60 W (max)
- **RS-485/422 transceivers:** MAX13085
- **RS-485/422 internal termination resistor:** 120 Ω

LYNKED Mesh RF (Wi-SUN®)

- Operates based on IEEE® 802.15.4g/e standard
- **Frequency band:** US915 (902-928 MHz)
- Mesh network topology
- **Output power:** 27 dBm (max)
- **Receiving sensitivity:** -108 dBm @50 kbps, PER=10%
- **Antenna gain:** 5 dBi (TQC-900X antenna)
- **Antenna input impedance:** 50 Ω
- **VSWR:** ≤ 1.5 typical
- **Data rate:** 50 kbps (129 channels)
- **Recommended max number of end-devices:** ~400

RS-485

- Supports two-wire and four-wire RS-485 communication (RS-422 capable)
- **Baud rate:** 9600 bit/s
- Half/full-duplex communication
- **Recommended cable length:** > 25 m

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Embedded System

- **Processor:** Arm®-based
- **Memory:** 1 GB RAM
- **Storage:** 32 GB
- **Operating System:** Linux

Environment

- Pollution Degree 2 environments
- **Altitude:** Up to 2000 m
- For indoor and outdoor use when used in an appropriate enclosure
- **Operating temperature:** 0 °C to +60 °C
- **Relative humidity:** 0% to 95% (non-condensing) at 25 °C

Network & Protocols

- **Network:** Gigabit Ethernet (both ports) support full-speed connections
- **Protocols:** LYNKED Mesh RF (Wi-SUN®), TCP/IP
- **Optional add-Ons:** BACnet, Modbus RTU (through RS-485/422), Smart Meter Protocols

Security

- Strong AES encryption of data in motion
- Multi-level authorization
- Password protection authentication control
- RSA and DSA cryptographic key-based access

Data Collection

- Automatically collects and stores data at configurable time intervals
- Collected data is transferred out via secure encrypted channel