TRB501

INDUSTRIAL 5G GATEWAY

Experience the power of next-gen connectivity with the TRB501 Industrial 5G Gateway. Designed for demanding environments, it delivers blazing-fast, low-latency 5G for a new era of automation and efficiency. Built to push data faster with a 2.5 Gbps Ethernet and coupled with 5G carrier aggregation (3GPP Release 16), this compact device is ideal for solutions like POS systems, security installations, and IIoT applications.

TRB501 360° VIEW

NEXT-GEN 5G

Lower latency, better spectrum use, and 5G carrier aggregation

HIGH-SPEED ETHERNET

Ultra-high wired data speeds of up to 2.5 Gbps wired

COMPACTNESS

5G in limited spaces without compromising performance

IIoT PROTOCOL-READY

Modbus, DNP3 and DLMS for SCADA, smart grid, and telemetry

RMS

REMOTE MANAGEMENT SYSTEM

COMPATIBLE WITH TRB501

MANAGEMENT | ALERTS | CONFIGURATION | ACCESS | FOTA

KEY FEATURES

HARDWARE

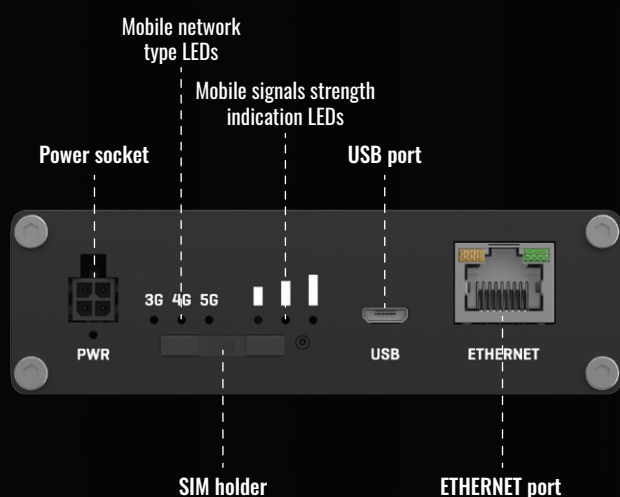|	
Mobile	5G Sub-6 Ghz SA/NSA: 2.4/3.4 Gbps DL (4x4 MIMO), 900/550 Mbps UL (2x2); 4G LTE: Cat 19 1.6 Gbps DL, Cat 18 200 Mbps UL; 3G: 42 Mbps DL, 5.76 Mbps UL
CPU	Qualcomm, Single-Core, 1.5 Ghz, ARM Cortex-A7
RAM	512 MB
Storage	512 MB
SIM	1 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V, external SIM holder
Antenna connectors	4 x SMA for Mobile
Ethernet	1 x RJ45 port, 10/100/1000/2500 Mbps
Inputs/Outputs	1 x Digital Input, 0 - 6 V detected as logic low, 8 - 30 V detected as logic high, 1 x Digital Output, Open collector output, max output 30 V, 300 mA
Grounding	1 x Grounding screw
Status LEDs	3 x connection type status LEDs, 3 x connection strength LEDs, 2 x ETH status LEDs, 1 x Power LED
Operating temperature	-40° C to 75° C
Housing	Anodized aluminum housing and panels
Dimensions (W x H x D)	100 x 30 x 93.4 mm
Weight	241g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	SMS, USSD, Block/Allow list, Band management, SIM PIN code management, APN, Bridge, Passthrough, Framed routing
Network features	VoIP passthrough support, Connection monitoring, Firewall, Firewall status page, Ports management, Network topology, DHCP, QoS / Smart Queue Management (SQM), DNS over HTTPS, DDNS, Network backup, Load balancing, Hotspot, Hotspot 2.0, SSHFS, VRF support, Traffic Management, IGMP Proxy, Port Mirroring
Security	Authentication, Firewall, Attack prevention, VLAN, Mobile quota control, WEB filter, Access control, SSL certificate generation
VPN and tunneling	OpenVPN, OpenVPN Encryption, IPsec, GRE, PPTP, L2TP, Stunnel, DMVPN, SSTP, ZeroTier, WireGuard, Tinc, Tailscale
Monitoring and Management	WEB UI, FOTA, SSH, SMS, Call, Email, TR-069, MQTT, SNMP, JSON-RPC, RMS
Cloud solutions	RMS, ThingWorx, Cumulocity - Cloud of Things, Azure IoT Hub, AWS IoT Core
Services	OPC UA, Modbus, Data to Server, Modbus MQTT GATEWAY, DNP3, DLMS/COSEM

FRONT VIEW — BACK VIEW

Mobile network type LEDs

Mobile signals strength indication LEDs

Power socket

USB port

Reset button

Grounding screw

3G 4G 5G

PWR

USB

ETHERNET

MOBILE

RESET

SIM holder

ETHERNET port

Mobile antenna connector