

ATRM50

5G ROUTER FOR TRANSPORTATION

The ATRM50 is a rugged 5G router built for transportation, featuring 4 x M12 Gigabit Ethernet ports and M12 power input for durable, secure connections. It delivers ultra-high cellular speeds up to 3.4 Gbps and supports dual SIM with eSIM™ for seamless failover. Certified to EN 45545-2 and EN 50155 standards, the ATRM50 is engineered to meet the rigorous safety and reliability requirements of railway systems—while also being a strong fit for other demanding transportation environments. The router comes with GNSS, an integrated mounting bracket, and is compatible with RMS for efficient on-site and remote management.



ATRM50 360° VIEW





4 × M12 X-coded Gigabit Ethernet ports, 1 × M12 A-coded power input

5G

Ultra-high cellular speeds of up to 3.4 Gbps

DUAL SIM & eSIM™

With auto failover, backup WAN and other switching scenarios

CERTIFICATES AND FEATURES

EN 45545-2 and EN 50155. Ignition detection and low battery





RMS REMOTE MANAGEMENT SYSTEM

COMPATIBL

MANAGEMENT

ALFRTS

CONFIGURATION

ACCESS

WITH SEATRN 50

FOTA



KEY FEATURES

HARDWARE

Mobile	5G Sub-6 GHz SA, NSA 2.4, 3.4Gbps DL (4x4 MIMO) 900, 550Mbps UL (2x2 MIMO); 4G LTE: DL Cat 19 1.6Gbps (4x4 MIMO), UL Cat 18 200Mbps
CPU	Mediatek, Dual Cores, 880 Mhz, MIPS1004Kc
RAM	256 MB DDR3
Storage	16 MB serial NOR flash, 256 MB serial NAND flash
TPM	Identification and authentication module, TPM 2.0 standard
Powering options	M12 A code 4-pin male, 9 - 50 VDC
eSIM	Consumer type eSIM, profile download and removal operations, up to 7 eSIM profiles; does not include data plans
SIM	2 x SIM slots (Mini SIM - 2FF), 1.8 V/3 V
Antenna connectors	4 x SMA for Mobile, 2 x RP-SMA for Wi-Fi, 1 x SMA for GNSS
Ethernet	4 x M12 X code 8-pin female ports, 10/100/1000 Mbps
Wi-Fi	802.11b/g/n/ac Wave 2 (Wi-Fi 5) with data transmission rates up to 867 Mbps (Dual Band, MU-MIMO)
GNSS	GPS, GLONASS, BeiDou, Galileo and QZSS
Inputs/Outputs	2 x Inputs for Ignition Detection and Low Battery
Grounding	1 x Grounding screw
Status LEDs	4x WAN type, $3x$ Mobile connection type, $3x$ Mobile connection strength, $6x$ LAN status, $2x$ WAN status, $1x$ Power, $2x$ 2.4G and 5G Wi-Fi
Operating temperature	-40 °C to 75 °C
Housing	Anodized aluminum housing and panels
Dimensions (W x H x D)	167 x 46.2 x 112.4 mm
Weight	550 g

SOFTWARE

Operating system	RutOS (OpenWrt based Linux OS)
Mobile features	eSIM, SIM switch, Status, SMS, USSD, Block/Allow list, Multiple PDN, Band management, SIM idle protection service, SIM PIN code management, APN, Bridge, Passthrough, Framed routing
Wireless features	Wi-Fi security, SSID/ESSID, Wi-Fi users, Wireless Connectivity Features, Wireless MAC filter, Wireless QR code generator, TravelMate
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
Security	Authentication, Firewall, Attack prevention, VLAN, Mobile quota control, WEB filter, Access control, TPM, SSL certificate generation
VPN and tunneling	OpenVPN, 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

