

TR-2002-5G



5G Industrial Router

Product Overview

Techroutes TR-2002-5G router is a compact, Gigabit Ethernet, ruggedized 5G/4G/3G cellular networking solution designed for mission-critical connectivity in the most challenging environments. It is qualified for M2M (Machine to Machine), IoT (Internet of Things) and In-Vehicle applications. Super mini size suitable for embedding applications.

In addition to the robustness, reliability, security, friendly-using, the TR-2002-5G is competent to be engineered to protect against extreme temperatures, humidity, shocks, vibrations, reverse polarity, and transient voltage, which is widely used in more than twenty industrial fields, such as CCTV security surveillance, AMR, vehicle, retails, vending machines, power control, water schedule, traffic, oil field, weather forecast, environmental protection, street lamp control, post, bank and many other fields.

Technical Specification

TR-2002-5G	
Compatible Mobile Networks	5G (SA and NSA)
	4G LTE (FDD/TDD)
	3G UMTS WCDMA (HSUPA/HSDPA/HSPA/HSPA+/DC-HSPA+)
Cellular Frequency	5G NR SA: n1/n28/n41/n78/n79
	5G NR NSA: n41/n78/n79
	TDD LTE:B34/ B38/ B39/ B40/ B41
	FDD LTE:B1/B3/B5/B8
Hardware	UMTS/HSPA/HSUPA/HSPA/HSPA+: B1/B8
	CPU: 880Mhz dual core
	Flash: 128Mb up to 8G
WAN	RAM: 1G up to 4G
	1x Cell Interface (5G/4G/3G) SIM Card Slot
	Support 1.8V/3V UIM/SIM cards, E-SIM is supported
LAN	1x 10/100/1000M WAN Port RJ45 Interface
	1x10/100/1000M LAN Port RJ45 Interface
Wi-Fi	802.11a/b/g/n 802.11ac optional
	AP and client; Up to 64 connected devices,WPA2 Enterprise (WiFi),Hotspot/Captive Portal, SSID-based Priority
Serial connector	RS232 (Terminal Socket)
DI/DO	4 Digital I/O ports (Terminal Socket) Optional
SMS,SMS Control and Alarm	Receive and Send the SMS WAN Cell APN configuration via SMS SMS/Voice Control and Alarm. SMS or Call to control router to be online, offline, reboot, signal and status monitor; SMS is default feature, SMS text sending and receiving
Features	WAN ports support Cell/Static IP/DHCP/PPPoE (on demand, keep alive, schedule, manual, standby)
	Failover/Failback and Load Balance
	Advanced Modem Failure Check
	IP Pass through
	WiFi as WAN
	DHCP Server, Client, Relay
	DNS and DNS Proxy
	DDNS
	Syslog
	UPnP
	NTP
	DMZ
	Multicast/Multicast Proxy
	QoS (DSCP and Priority Queuing)

	MAC Address Filtering
	VLAN 802.1Q
Routing	Static
	Dynamic (OSPF/BGP/RIP)
	Virtual Server/Port Forwarding
	IPv6
	VRRP
VPN	IPSec – Tunnel, NAT-T, and transport modes; IKEv1 & IKEv2
	Hash (MD5, SHA128, SHA256, SHA384, SHA512), Cipher (AES, 3DES, DES)
	GRE tunneling
	PPTP support
	L2TP, L2TP over IPSec support
	VPN pass-through
	Open VPN support
	DMVPN (option)
	Certificate support
	Multiple networks supported in a single tunnel, site-to-site dynamic VPN with NHRP; VTI Tunnel support
Optimized IP Communication	WAN Affinity and QoS allow prioritization of VoIP services
	Advanced VPN connectivity options to HQ
	SIP ALG and NAT to allow VoIP and UC communications to traverse firewall
	802.1p/q for LAN QoS segmentation and treatment of VoIP on LAN
	Private Network support (wired & 5G/4G/3G WAN)
Security	RADIUS and TACACS+ support (Optional)
	802.1x authentication for Ethernet
	Certificate support
	ALGs
	MAC Address Filtering
	Advanced Security Mode (local user management only)
	Per-Client Web Filtering
	IP Filtering
	Content Filtering (basic)
	Website Filtering
	Zone-Based Object Firewall with host address (IP or FQDN), port, and mac address
	Other Details: NAT, SPI, port blocking, service filtering (FTP, SMTP, HTTP, RPL, SNMP, DNS, ICMP, NNTP, POP3, SSH), protocol filtering, WAN ping (allow/ignore)
Management	GUI
	Telnet
	SSH
	SNMP V1/V2/V3

	SMS control
	TR-069 (optional)
	Reset Button
	Techroutes Net view NMS
Firmware upgrade	Support firmware update locally, remotely (LAN, WiFi and OTA WAN) and NMS (Network Management System) option;
Antenna	2-4 cellular antenna connectors (SMA)
	2 Wi-Fi antenna connectors (SMA)
	1 GPS antenna connector (SMA)
Led	SYS*1, VPN (IPSec)*1, Cell Signal*1, Cell*1, WAN*1, LAN*1, Wi-Fi*1
Power supply	Power (DC Jack, 2 Pin Terminal Block for wire connection) Input Voltage range: 5-40 VDC / 5-60VDC option, 12VDC 2A adapter recommended
	Built-in transient and reverse polarity voltage protection
Operating Temperature	Storage: (-40°C to 85°C)
	Working: (-35°C to 75°C)
Humidity	5% to 95% operating
	5% to 95% storage
Dimensions	(L x W x H): 100mm x 60mm x 21mm
Weight	About 230g (Without accessories)
	About 750g (With accessories)
Case	Metal Gray-Black
	Wall Mount/Desktop

Order Information :

Product	Description
TR-2002-5G	Techroutes Industrial 5G Router (1xCell Interface (5G/4G/3G), 1xGigabit Ethernet WAN Interface, 1xGigabit Ethernet LAN Interface, Power Adapter)

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