TMR-5002

EN50155 Multifunction VPN Router + up to 2 LTE 4G + 2 serial ports + 2 Gigabit X-coded Ethernet (incl.1 PD) for Load Balancing VPN, Protocol Gateway, Storage**; WVinput; IP65/54

- *Up to 2xLTE 4G module(4SIMs) + 2xGigabit X-coded ports(incl. 1PD)*
- *Support LTE Cat 6 (APAC & EUNA models) or Cat 12/9/13 (WW model)*
- *Up to 2 concurrent modem for 3G/4G LTE Link & GPS*
- *Built-in 2 serial ports with 2.5K isolation(RS422/RS485) or w/o isolation(RS232)*
- *VPN router for Multi-site VPN, OpenVPN, L2TP over IPsec, IPsec, L2 over GRE , IPGRE*
- *Load Balancing built-in 5 mechanism*
- *Optional EMMC Flash storage on-board***
- *Support NAT and Firewall*
- *Support Modbus gateway on serial ports*
- *Galvanic isolation on WV model from 16.8V~137.5V input*
- *Built-in environmental monitoring for router inside info with voltage, current, temperature; LTE graphic signal strength*
- *Editable login page of captive portal for hot-spot application*
- *USB port for backup, restore the configuration file and upgrade firmware; Dual image firmware*
- *IP 65 /54 Aluminum housing for best heat dissipation and preventing moist ingress*
- *Optional eSIM chip enables router with versatile data plans***
- *EN50155/61373/45545 verification for railway application*

OVERVIEW

Lantech TMR-5002 series is a next generation EN50155 multi-function VPN router up to 2x LTE modem + 2x Gigabit Ethernet(incl.1 PD)+ 2 serial ports that supports advanced function of VPN, Load-Balancing, EMMC Flash Storage**, Protocol gateway(Modbus), Storage**, and LTE dual SIM fail-over for on-board / onboard-to-ground applications. The dual core CPU with 1.6GHz + 256M flash enables the router to multi-task smoothly.

Dual concurrent LTE design 4G/3G for load-balancing

With dual LTE module design (2L model), 4 SIM card slots, TMR-5002 can allow auto-swap, failover & failback between multiple service providers for real non-stop connection. With concurrent LTE modules, it can also allocate bandwidth by

“ Load Balancing with 8 schemes between multiple WANs.

Optional EMMC Flash storage*

The optional EMMC flash storage on the router can offer 8G/16G/32G capacity.

Load Balancing with 5 mechanism for multi-WANs

TMR-5002 supports Load Balancing for LTE/WAN connections. There are five schemes with Load Balancing Function:

Pack	Algorithm	Description
Basic	Fixed	All traffic will be distributed to a single WAN.
	Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.
	Priority	Select the active WAN according to priority.
	Weighted Round-Robin	Evenly distribute the traffic over all working WAN links in circular order according to the specified weights.
	Custom Route	Routing through the selected WAN for each specific traffic, ex: TCP/UDP port number and IP address.

2 port serial connection, Modbus gateway

It builds in 2 port serial connection for RS232 or RS422,RS485 in which RS422/RS485 has 2.5KV isolation protection.

The built-in Modbus gateway can convert Modbus RTU/ASCII to Modbus TCP for device control.

VPN and firewall

Besides traditional VPN peer to peer tunneling, TMR-5002 support latest Multi-Site VPN function that is an efficient way for mesh tunneling. The registration is under cloud service and encrypted by SSH makes the connection easy and safe.

It supports Multi-Site VPN, OpenVPN, L2TP over IPsec, IPsec, L2 over GRE, IPGRE, and NAT for various VPN applications.

The built-in Layer-4 firewall includes DDoS, IP address filter / Mac address filter / TCP / UDP port number.

Support Routing Protocol: Static route / RIPv2 / OSPF / BGP / EIGRP

Lantech router series supports two routing methods: static routing and dynamic routing. Dynamic routing makes use of RIPv2, OSPF, EIGRP and BGP. The user can either choose one routing method to establish the routing table.

DIDO for alarm & email notice; Event log; Remote Web control

2 sets of DIDO function can support additional high/low physical contact for designate applications besides Port / Power events, for example, DIDO function can trigger alarm if the router was moved or stolen. In case of events, the IWMR-3002 will immediately send email and trap.

When the router is at remote area with limited access, Web control can help to get router status or remotely reboot by Web.

Wide range dual input voltage from 16.8-137.5V (WV model)

The TMR-5002 is able to work from dual 16.8V ~137.5V DC input (WV model) that is particular good for vehicle, rail train, depot etc applications.

Environmental monitoring for inside router info& alerting; LTE signal strength

The built-in environmental monitoring can detect router overall temperature, voltage, current where can send the syslog, email when abnormal.

The graphic LTE signal strength shows connection status at a glance.

USB port for back up, restore configuration and upgrade firmware; Dual image firmware

The built-in USB port can upload/download the configuration through USB dongle for router replacement

It supports dual-image firmware to choose which one to start.

Editable login page of captive portal

The TMR-5002 supports editable captive portal function that allows administrator to force end-users redirect to authentication page.

Optional eSIM**

By replacing physical SIM, optional eSIM chip will allow users to purchase data plans at low prices from local carriers in the world.

Ruggedized EN50155 design and FCC/CE, E-marking** certificate

The TMR-5002series is verified with EN50155,61373,45545 standard with IP65/54 housing. It passed tests under extensive Industrial EMI and environmental vibration and shocks standards. With CE & FCC radio certification for LTE and E-marking** certificate, the TMR-5002 is best for outdoor community, vehicle, power substation, process control automation etc. For more usage flexibilities, TMR-5002 supports operating temperature from -40°C to 65°C.

FEATURES & BENEFITS

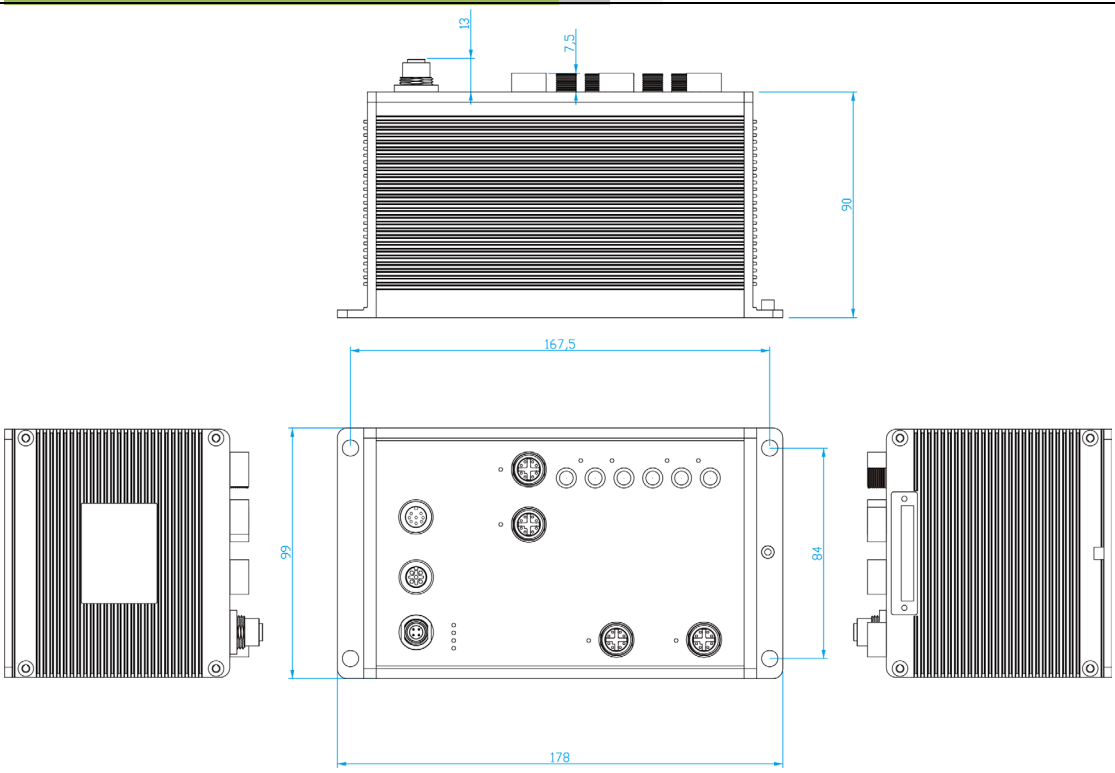
- **Built-in two Gigabit ports X-coded incl. 1 PD; 1LAN+1WAN or 2LAN**
- **6 xSMA/QMA** type connectors for LTE(2L model),**
- **HTTP/HTTPS/Telnet/SSH & Administration access**
- **Support IPv6 & IPv4 protocol**
- **Dual concurrent LTE 4G/3G design (2L model)for auto-swap/failover/failback between multiple ISPs for continuous service (four SIM card slots)**
- **GPS/ GLONASS (built-in LTE module) connection**
- **EMMC-FLASH storage**8/16/32G**
- **eSIM** to allow data-plan globally**
- **Load Balancing supports 5 mechanism between multiple WANs**

Pack	Algorithm	Description
Basic	Fixed	All traffic will be distributed to a single WAN.
	Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.
	Priority	Select the active WAN according to priority.
	Weighted Round-Robin	Evenly distribute the traffic over all working WAN links in circular order according to the specified weights.

	Custom Route	Routing through the selected WAN for each specific traffic, ex: TCP/UDP port number and IP address.

- **Built-in 2 x serial ports(RS232/RS422/RS485)**
- **Serial port with 2.5KV isolation on RS422/RS485**
- **Supports 2DI / 2DO(Digital Input / Output)**
- **Support Multi-Site VPN for mesh tunneling as well as Open VPN, L2TP over IPsec, IPsec, L2 over GRE , IPGRE and NAT for secured network connection**
- **Support Routing Protocol: Static route / RIPv2 / OSPF / BGP / EIGRP**
- **The built-in Layer-4 firewall includes DDoS, IP address filter / Mac address filter / TCP/UDP port number**
- **NAT/DMZ/Port Forwarding**
- **Built-in Modbus gateway converting Modbus RTU/ASCII to Modbus/TCP**
- **Radius Authentication, EAP-TLS, EAP-TTLS, PEAP**
- **Event alerting by Syslog, SNMP Trap, Email, Relay ; Permanent local log rotation / Maxi 1K records**
- **Remote Web control to get status or re-boot by Web**
- **Built-in RTC to keep track of time always**
- **Support SNTP to synchronize system clock**
- **Support LLDP discovery protocol**
- **Support DHCP Server and Client**
- **Built-in environmental monitoring for system input voltage, current and ambient temperature; Able to set alert when abnormal**
- **LTE signal strength**
- **Firmware upgradeable through TFTP/HTTP**
- **Configuration backup and restoration**
  - *Supports editable configuration file for system quick installation*
  - *USB port to upload/download configuration by USB dongle*
- **Dual image firmware**
- **Support editable captive portal login page**
- **IP 65/54 housing for water proof environment**
- **Wall-mount installation**
- **EN45545-2 Fire & Smoke, EN50155 and EN61373 shock/vibration verification**
- **Operation temperature -40~65C**

DIMENSIONS (unit=mm)



SPECIFICATION

Cellular Interface

Location Solutions	GPS, Glonass (EU/Americas) GPS, Glonass, Beidou, Galileo (APAC model only)
Band Options	**Asia-Pacific (APAC model)** **LTE =** B1, B3, B5※, B7, B8, B18※, B19※, B21※, B28, B38 (TDD), B39※ (TDD), B40 (TDD), B41※ (TDD) **DC-HSPA+/ HSPA+/ HSPA/ UMTS =** B1, B5※, B6※, B8, B9※, B19※ **Europe & North America (EUNA model)** **LTE =** B1, B2※, B3, B4※, B5※, B7, B8, B12※, B13※, B20, B25※, B26※, B29※, B30※, B41※ (TDD) **DC-HSPA+/ HSPA+/ HSPA/ UMTS =** B1, B2※, B3※, B4※, B5※, B8 **World Wide (WW model)** **LTE =** B1, B2※, B3, B4※, B5※, B7, B8, B9※, B12※, B13※, B18※, B19※, B20, B26※, B28, B29※, B30※, B32※, B41※ (TDD), B42 (TDD), B43 (TDD), B46※ (TDD), B48※ (TDD), B66※ **WCDMA =** B1, B2※, B3※, B4※, B5※, B6※, B8, B9※, B19※
Data Rates – LTE	**Asia-Pacific (APAC model)** Downlink (Cat 6): FDD: 300 Mbps TDD: 222 Mbps Uplink (Cat 6): FDD: 50 Mbps TDD: 26 Mbps **Europe & North America (EUNA model)** Downlink (Cat 6): FDD: 300 Mbps TDD: 222 Mbps Uplink (Cat 6): FDD: 50 Mbps TDD: 26 Mbps **World Wide (WW model)** Downlink: Cat 12: 600 Mbps Cat 9: 450 Mbps Uplink: Cat 13: 150 Mbps

Software

IPv6/4	Present
Login Security	Supports IEEE802.1x Authentication/RADIUS
	Optional Train Wireless Carriage Coupling for Auto wireless Coupling
Access Security	HTTP/HTTPS/Telnet/SSH & Administration; SNMP v1/v2/v3 access for authentication via MD5/SHA(v3) and Encryption via DES/AES(v3)
Protocol	PPPoE Client, DHCP server/client, Adjustable MTU, Port forwarding (NAPT), DMZ; NAT, SNTP, Firewall (Firewall (DDoS; IP address filter / Mac address filter / TCP/UDP port number), VRRP, DDNS
Routing	Static route / RIPv2 / OSPF / BGP / EIGRP
Management	SNMP v1,v2c,v3/ Web/Telnet/CLI
Load Balancing	5 schemes for multiple WAN
Basic	
Fixed	All traffic will be distributed to a single WAN.
Failover	Routes connections through preferred WAN link while others stand-by. Sequentially activating another link if the preferred link fails.
Priority	Select the active WAN according to priority.
Weighted Round-Robin	Evenly distribute the traffic over all working WAN links in circular order according to the specified weights
Custom Route	Routing through the selected WAN for each specific traffic ex: TCP/UDP port number and IP address.
Timer	Built-in Real Time Clock to keep track of time always(RTC)
Discovery	IEEE 802.1ab Link Layer Discovery Protocol (LLDP)
SNMP trap	Device cold / warm start Port link up / link down DI / DO high / low
Environmental Monitoring	System status for input voltage, current , ambient temperature to be shown in GUI and sent alerting if any abnormal status
Graphic signal display	Graphic LTE signal strength & TX / RX rate display
Remote Web control	To reboot or get status of router by Web
Maintenance	Firmware upgradeable through TFTP/HTTP
Configuration backup & restore	Supports text configuration file for quick system installation USB port to upload/download configuration and upgrade firmware by USB dongle

Physical Ports & System

Connectors	10/100/1000T: 2x ports M12 8-pole X-coded with Auto MDI/MDI-X function (one port PD; 1LAN+1WAN or 2LAN) USB/Console connector: 1 x M12 8-pole A-coded DI/DO : 1 x M12 5-pole A-coded Power Input connector : 1 x M12 4-pole A-coded Serial connector : 2 x M12 8-pole X-coded SIM card slots : 4(2L) or 2(1L) **2L model** SMA/QMA** connector for LTE: 4 (female) SMA/QMA** connector for GPS: 2 (female) **1L model** SMA/QMA** connector for LTE: 2 (female) SMA/QMA** connector for GPS: 1 (female)
Serial Baud Rate	1000Kbps high data rate,250kbps normal for RS232 ; 20Mbps high data rate,250kbps normal for RS422/RS485
Serial Data Bits	5, 6, 7, 8
Serial Parity	odd, even, none, mark, space
Serial Stop Bits	1, 1.5, 2
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (2-wire)	Data+, Data-,GND
Isolation protection	RS422/RS485 2.5KV isolation; 8KV contact & 15KV air RS232 8KV contact and 15KV air ESD DIDO 2.5KV isolation Input power 1.5KVA isolation
DI/DO	2 Digital Input (DI) : Level 0: -30~2V / Level 1: 10~30V Max. input current:8mA 2 Digital Output(DO): Open collector to 80 VDC, 50mA
EMMC Storage**	8/16/32 GB

LED Indicators

Power & system indicator	Per unit: Power 1 (Green), Power 2 (Green), P-Fail (Red) , System Ready(Green), Serial1/2(Green)
10/100/1000Base-T(X) port indicator	Link/Activity (Green), Speed (Yellow)
SIM	Green for Link/Act
GPS	Green for Link/Act
Fault	Red: Ethernet link down or power down

Fault contact

Relay	Relay output to carry capacity of 1A at 24VDC

Power

Input power	Dual DC input, 16.8VDC~137.5VDC for (WV model)
Power consumption (Typ.)	18 Watts

Physical Characteristic

Enclosure	IP 65/54 aluminum case
Dimension	178 (W) x 99 (D) x 103 (H) mm
Weight	1000g

Environmental

Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Operating Temperature	-40°C ~ 65°C (-40°F ~ 149°F)
Operating Humidity	5% to 95% Non-condensing

Regulatory approvals

EMC	FCC Part 15 Class A, EN55032 , EN55024
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-6-2
Radio Frequency	EN 301 489-1,

	EN 301 489-17, EN 301 489-19, EN 301 489-52, EN 301 908-1※, EN 303 413, EN 62311
Safety	EN60950 (LVD), AS60950 (LVD)
Stability Testing	EN61373 (Shock & Vibration)
Verifications & report	EN50155, EN50121-3-2, EN50121-4 verification EN45545-2 R13/R22/R23/R24/R25 (EN ISO 4589-2, EN ISO 5659-2, NF X70-100-1 & 2) Fire & Smoke verification
MTBF	565,049 Hrs (IEC62380 standards)

Warranty	5 years

*Future Release

**Optional

※Standard test of the following bands are not listed in EN 301 908-1 report:

(APAC not listed bands) LTE = B5, B18, B19, B21, B39, B41

WCDMA = B5, B6, B9, B19;

(EUNA not listed bands) LTE = B2, B4, B5, B12, B13, B25, B26, B29, B30, B41

WCDMA = B2, B3, B4, B5;

(WW not listed bands) LTE = B2, B4, B5, B9, B12, B13, B18, B19, B26, B29, B30, B32, B41, B46, B48, B66

WCDMA = B2, B3, B4, B5, B6, B9, B19

ORDERING INFORMATION

All QMA connector models are with –Q model name.

- **TMR-5002-1L-2S-WV-54-EUNA……P/N: 8631-021**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2S-WV-54-APAC……P/N: 8631-022**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2S-WV-54-WW……P/N: 8631-023**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SA-WV-54-EUNA……P/N: 8631-0211**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SA-WV-54-APAC……P/N: 8631-0221**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SA-WV-54-WW……P/N: 8631-0231**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SB-WV-54-EUNA……P/N: 8631-0212**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SB-WV-54-APAC……P/N: 8631-0222**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2SB-WV-54-WW……P/N: 8631-0232**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-1L-2S-WV-65-EUNA……P/N: 8631-027**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2S-WV-65-APAC……P/N: 8631-028**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2S-WV-65-WW……P/N: 8631-029**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2SA-WV-65-EUNA……P/N: 8631-0271**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2SA-WV-65-APAC……P/N: 8631-0281**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2SA-WV-65-WW……P/N: 8631-0291**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2SB-WV-65-EUNA……P/N: 8631-0272**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-1L-2SB-WV-65-APAC……P/N: 8631-0282**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing

- **TMR-5002-1L-2SB-WV-65-WW……..……..P/N: 8631-0292**
  EN50155 Multifunction VPN Router + 1 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2S-WV-54-EUNA……..……..P/N: 8631-024**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2S-WV-54-APAC……..……..P/N: 8631-025**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L2S-WV-54-WW……..……..P/N: 8631-026**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SA-WV-54-EUNA……..……..P/N: 8631-0241**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SA-WV-54-APAC……..……..P/N: 8631-0251**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SA-WV-54-WW……..……..P/N: 8631-0261**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SB-WV-54-EUNA……..……..P/N: 8631-0242**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SB-WV-54-APAC……..……..P/N: 8631-0252**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2SB-WV-54-WW……..……..P/N: 8631-0262**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP54 housing
- **TMR-5002-2L-2S-WV-65-EUNA……..……..P/N: 8631-030**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2S-WV-65-APAC……..……P/N: 8631-031**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2S-WV-65-WW……..……P/N: 8631-032**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS232 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SA-WV-65-EUNA……..……P/N: 8631-0301**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SA-WV-65-APAC……..……P/N: 8631-0311**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SA-WV-65-WW……..……P/N: 8631-0321**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS422 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SB-WV-65-EUNA……..……P/N: 8631-0302**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; EU and US band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SB-WV-65-APAC……..……P/N: 8631-0312**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; APAC band; dual 16.8V~137.5VDC; -40~65C; IP65 housing
- **TMR-5002-2L-2SB-WV-65-WW……..……P/N: 8631-0322**
  EN50155 Multifunction VPN Router + 2 LTE 4G SMA connectors+ 2 serial RS485 ports + 2 Gigabit X-coded Ethernet (incl. 1PD) for load-Balancing, VPN, Protocol Gateway; Worldwide band; dual 16.8V~137.5VDC; -40~65C; IP65 housing

EMMC Flash Storage

- **8G……..……..P/N:8850-113**
- **16G……..……..P/N:8850-114**
- **32G……P/N:8850-115**

Software License

- **LOAD BALANCING Full Package……..……P/N: 9000-102**

OPTIONAL ACCESSORIES

Management System

- **InstaAir……..…….....P/N: 9000-121**
  Cloud Based Fleet Management System for Routers

GPS Antenna

- **ANT12000001** SMA GPS antenna, 28dB, 300m

Cellular Antenna

- **ANT11000044** 2G/3G/4G dipole antenna, 704-960/1710~2690MHz, 1.6dBi, SMA plug, EU

- **ANT11000045** 2G/3G/4G dipole antenna, 698-960/1710~2690MHZ, 3dBi, SMA plug, US

Antenna Base

- **ADA11000053** Magnetic antenna base for 3G/4G, RP SMA Jack Base, Length : 1M

Lantech Communications Global Inc.

www.lantechcom.tw
info@lantechcom.tw