



TAR-620-M12-MV

**Industrial EN50155 IEEE 802.11 a/b/g/n 3G Cellular Router
With 2x10/100Base-T(X), M12 connector**

Features

- Leading EN50155-compliant wireless access point for rolling stock application
- High Speed Air Connectivity: WLAN interface support up to 300Mbps link speed
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Secured Management by HTTPs
- Various kind of WAN Connection Type supported: Dynamic/Static IP, PPPoE, Modem Dial Up
- IP table configurable to prevent access from unauthorized IP address
- Support VPN for secured network connection (Open VPN , PPTP VPN)
- Support NAT Setting (Virtual Server , Port Trigger , DMZ , UPnP)
- Support DHCP forwarding through PPTP function
- 3.5G HSDPA Modem dial up included
- Dual redundant Ethernet ports support Ethernet redundant mode (Recovery time < 10ms) and switch mode in M12 connector (D-coding)
- 1KV isolation for PoE P.D. port for PoE model.
- Event Warning by Syslog, Email, SNMP Trap and Relay output
- Ultra rugged enclosure for toughest industrial usages
- Wall mounting enabled



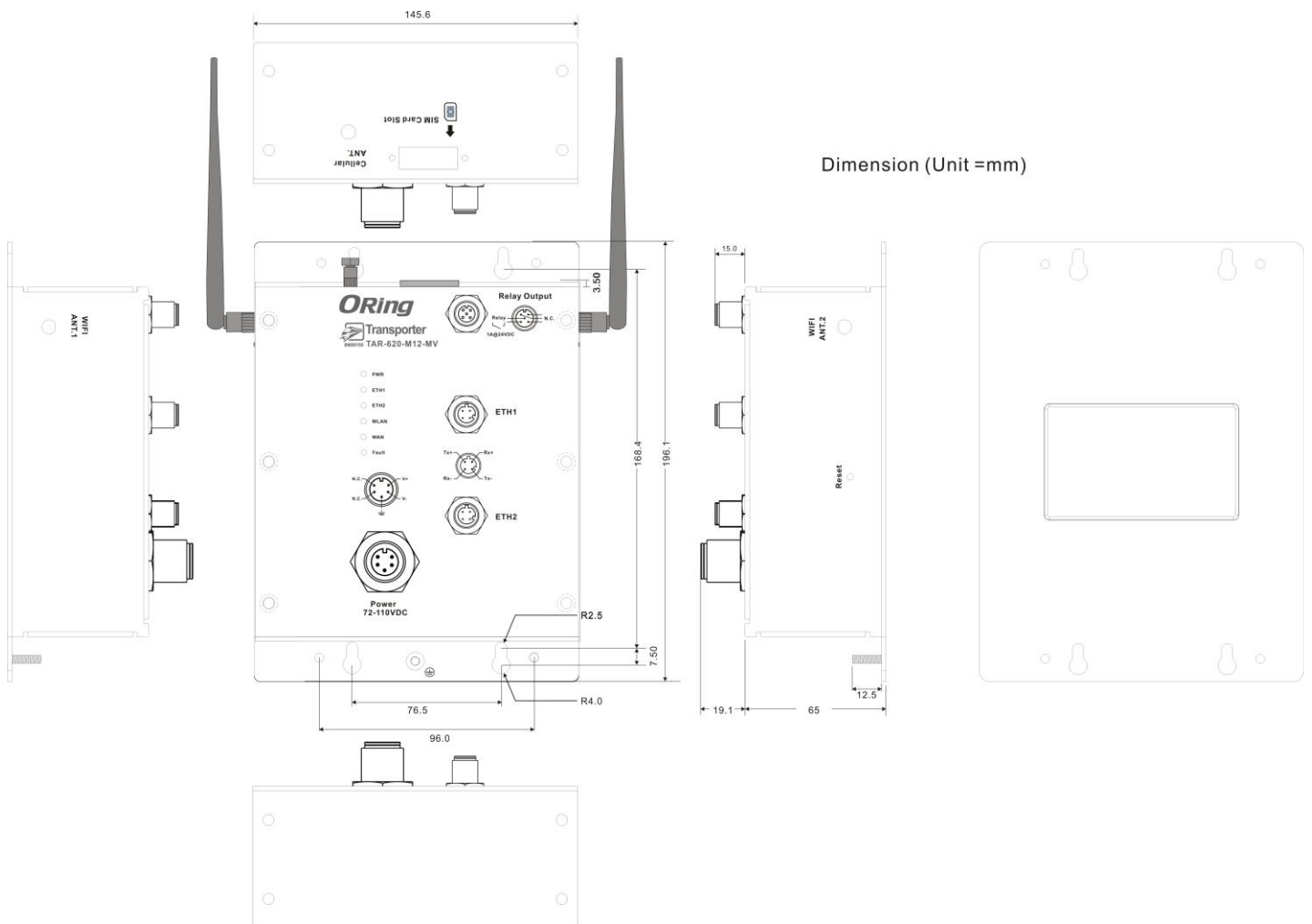
Introduction

ORing's Transporter™ series cellular router is designed for industrial and rolling stock wireless applications, such as vehicle, and railway applications. TAR-620-M12-MV is reliable IEEE802.11 a/b/g/n router with 2 ports LAN which is fully compliant with EN50155 certification. It could be configured to operate in 3 modes of routing function: Dynamic/Static IP route, PPPoE authentication, and Cellular modem dial up. Users can set up WLAN environment to fulfill demands of various applications rapidly by dialing up cellular modem. TAR-620-M12-MV EN50155 cellular VPN router use M-series connectors to ensure tight, robust connections, and guarantee reliable operation against environmental disturbances, such as vibration and shock. In addition, TAR-620-3G-M12 also provides 60Vdc to 160Vdc power input by M23 connector. Therefore, TAR-620-M12-MV is one of the most reliable choices for rolling stock applications on the wireless network.

Application

In TAR-620-M12-MV, there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up. TAR-620-M12-MV also support NAT, VPN and Back up functions. You can build up the wireless network and connect to the Internet easily.

Dimension



Specifications

ORing EN50155 WLAN Access Point Router Model	TAR-620-M12-MV
Physical Ports	
10/100Base-T(X) Ports in M12 Auto MDI/MDIX (4-pin D-coding)	2
SIM Card Slot	1
WLAN Interface	
Antenna Connector	2 x External reverse SMA-type antenna connector
Radio Frequency Type	DSSS, OFDM
Modulation	IEEE802.11a : OFDM with BPSK, QPSK, QAM, 64QAM IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QAM
Frequency Band	America / FCC : 2.412~2.462 GHz (11 channels) 5.180~5.240 GHz & 5.745~5.825 GHz (9 channels) Europe CE / ETSI : 2.412~2.472 GHz (13 channels) 5.180~5.240 GHz (4 channels)
Transmission Rate	IEEE802.11b: 1 / 2 / 5.5 / 11 Mbps IEEE802.11a/g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps IEEE801.11n: up to 300Mbps
Transmit Power	802.11a: 12dBm ± 1.5dBm@54Mbps 802.11b: 17dBm ± 1.5dBm@11Mbps 802.11g: 16dBm ± 1.5dBm@54Mbps 802.11gn HT20: 15dBm ± 1.5dBm @MCS7 802.11gn HT40: 14dBm ± 1.5dBm @MCS7 802.11an HT20: 12dBm ± 1.5dBm @MCS7 802.11an HT40: 11dBm ± 1.5dBm @MCS7
Receiver Sensitivity	802.11a : -76dBm ± 2dBm@54Mbps 802.11b : -85dBm ± 2dBm@11Mbps 802.11g : -76dBm ± 2dBm@54Mbps 802.11gn HT20:-75dBm ± 2dBm@MCS7 802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7
Encryption Security	WEP: (64-bit ,128-bit key supported) WPA/WPA2 :802.11i(WEP and AES encryption) WPAPSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption
Wireless Security	SSID broadcast disable
Cellular Interface	
Antenna Connector	1 x External reverse SMA-type antenna connector
Cellular Standard	GSM / GPRS/ EGPRS/ EDGE / WCDMA / HSDPA / HSUPA
Band Option	Dual-band : HSUPA 1900/2100 MHz Quad-band : GSM/GPRS/EDGE 850/900/1800/1900 MHz WCDMA/HSDPA 850/900/1900/2100 MHz
Protocol Support	
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, PPPoE
LED Indicators	
Power Indicator	1 x LED, PWD:Green for DC Power on
10/100Base-T(X) Indicator	2 x LEDs, Green for port Link/Act
WLAN LED	1 x LED, Green for WLAN Link/Act
WAN LED	1 x LED, Green for Cellular modem Link/ Act
Fault Indicator	1 x LED, Red for Ethernet link down or power down indicator
Fault Contact	

Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Input Power	Single Power Inputs. 72-110 VDC (43~160 VDC) on 5-pin 7/8" male a-coding connector
Power Consumption (Typ.)	12 Watts Max.
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristic	
Enclosure	IP-40
Dimension (W x D x H)	143(W) x 65(D) x 196.1(H) mm (5.62 x 2.55 x 7.72 inch.)
Weight (g)	1550g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-25 to 70°C (-13 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMI	FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2)
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27, EN61373
Free Fall	IEC60068-2-31
Vibration	IEC60068-2-6, EN61373
Rail Traffic	EN50155
Cooling	EN60068-2-1
Dry Heat	EN60068-2-2
Safety	EN60950-1
Warranty	5 years

Available Model	Model Name	Description
	TAR-620-M12-MV_US	Industrial EN50155 IEEE 802.11 a/b/g/n 3G cellular router with 2x10/100Base-T(X), M12 connector, US band
	TAR-620-M12-MV_EU	Industrial EN50155 IEEE 802.11 a/b/g/n 3G cellular router with 2x10/100Base-T(X), M12 connector, EU band

Packing List

- TAR-620-M12-MV x 1
- 2.4GHz/5GHz Antenna x 2
- CD x 1
- 3G Antenna x 1
- Quick Installation Guide x 1

Optional Accessories

- DR-45 series : 45 Watts power supply
- DR-120 series : 120 Watts power supply
- RF Antenna Base series
- DR-75 series : 75 Watts power supply
- WLAN RF Antenna series
- RF Cable series