

# TAP-620-M12

## Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point 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 300 Mbps link speed
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Support X-Roaming < 100 ms
- Support wireless load balance
- Support external SMA antenna installation
- Support AP/Client /Bridge /AP-Client Mode
- Support MAC Filter
- Wireless connecting status monitoring
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-40 housing design
- Wall-mount enabled



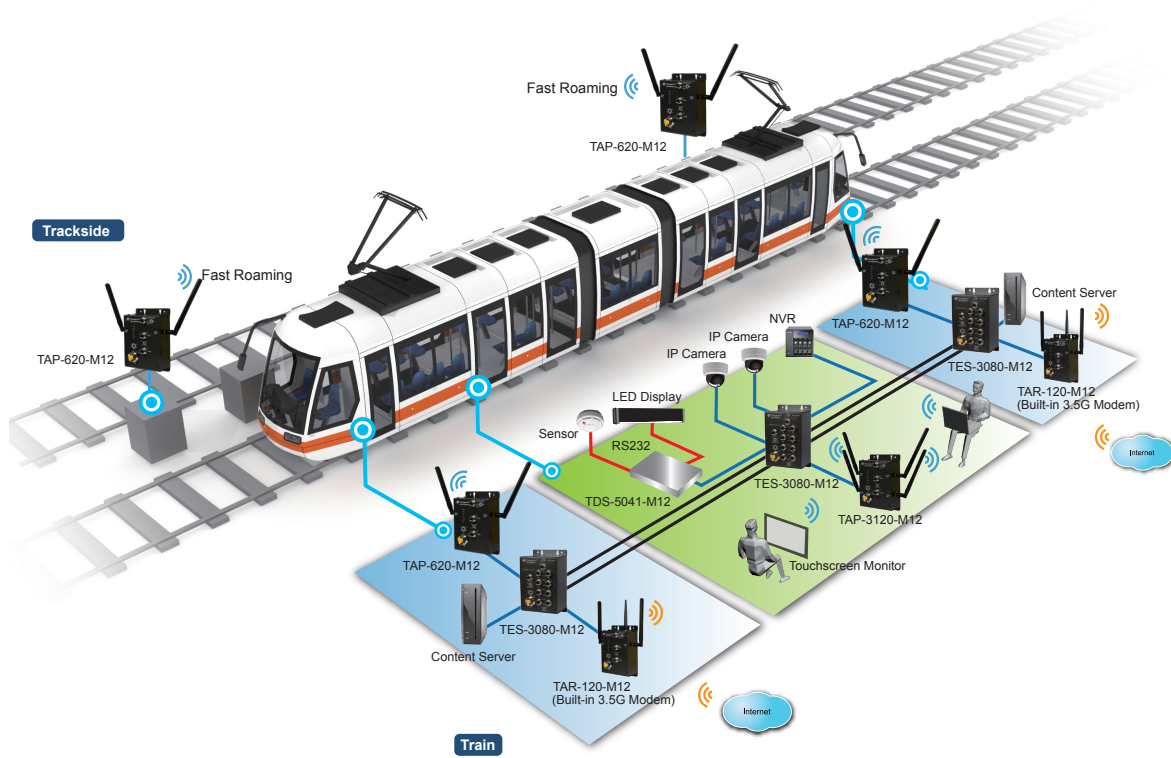
### Introduction

ORing's Transporter series access point is designed for industrial and rolling stock wireless applications, such as vehicle, and railway applications. TAP-620-M12 is a reliable 802.11 a/b/g/n WLAN Access Point with 2 Ethernet 10/100 ports. It can be configured to operate in AP/Client /Bridge /AP-Client Mode. TAP-620-M12 provides dual Ethernet ports in switch mode, so that you can use Daisy Chain to reduce the usage of Ethernet switch ports. TAP-620-M12 provides a dust-tight connection and reverses SMA-type connectors that can install any reverse SMA-type antennas to extend communication distance. It is specifically designed for the toughest industrial environments. You are able to configure TAP-620-M12 by WEB interface via LAN port or WLAN interface. TAP-620-M12 can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. Therefore, TAP-620-M12 is one of the best communication solutions for wireless applications.

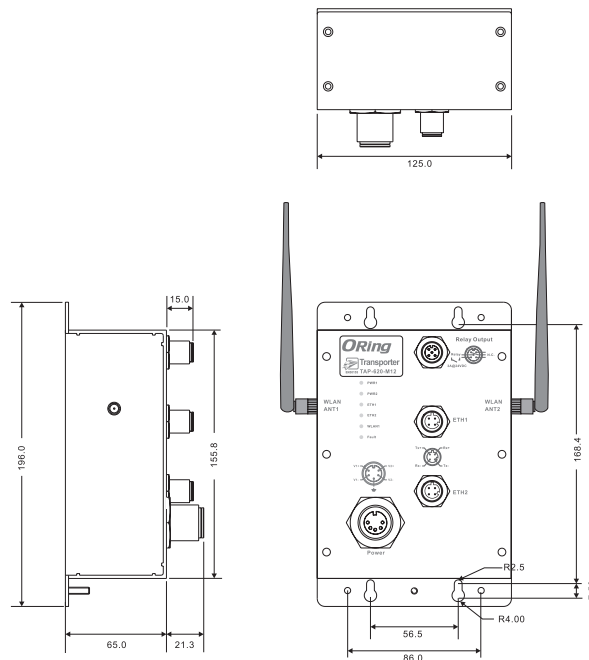
## Application

In practical operation of wireless access point, Windows utility (Open-Vision) is supported. This utility is very helpful for you to search and configure IP of access point on the industrial network.

In addition, the wireless access point support various kinds of operation modes include AP/Client/Bridge /AP-Client Mode. You can build up the wireless network easily.



## Dimensions



Unit=mm

## Specifications

ORing EN50155 WLAN Access Point Router Model	TAP-620-M12
<b>Physical Ports</b>	
10/100Base-T(X) Ports in M12 Auto MDI/MDIX	2
<b>WLAN Interface</b>	
Operating Mode	AP/Bridge/Client/AP-Client
Antenna Connector	2 x External reverse SMA-type antenna connector
Radio Frequency Type	DSSS, OFDM
Modulation	IEEE802.11a/n: OFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g/n: OFDM with BPSK, QPSK, 16QAM, 64QAM
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 ) Japan(JP): 2.412~2.484 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 IEEE802.11n(40MHz): UP to 300 Mbps
Transmit Power	IEEE802.11a:13dBm ±1.5dBm IEEE802.11b:16dBm ±1.5dBm IEEE802.11g:14dBm ±1.5dBm IEEE802.11n(2.4G@20MHz):13dBm ±1.5dBm IEEE802.11n(2.4G@40MHz):12dBm ±1.5dBm IEEE802.11n(5G@20MHz):12dBm ±1.5dBm IEEE802.11n(5G@40MHz):12dBm ±1.5dBm
Receiver Sensitivity	IEEE802.11a: -68dBm ±2dBm@54Mbps IEEE802.11b: -82dBm ±2dBm@11Mbps IEEE802.11g: -68dBm ±2dBm@54Mbps IEEE802.11n(2.4G@20MHz,MCS15): -64dBm ±2dBm IEEE802.11n(2.4G@40MHz,MCS15): -60dBm ±2dBm IEEE802.11n(5G@20MHz,MCS15): -64dBm ±2dBm IEEE802.11n(5G@40MHz,MCS15): -60dBm ±2dBm
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 and enable
<b>Protocol Support</b>	
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP,
<b>LED Indicators</b>	
Power Indicator	2 x LEDs, Green for Power indicator
10/100Base-T(X) Indicator	2 x LEDs, Green for port Link/ Act at 100Mbps. Amber for port Link/ Act at 10Mbps
WLAN LED	1 x LEDs, Green for WLAN Link /Act
Fault	1 x LEDs, Red for Ethernet link down or power down indicator
<b>Fault Contact</b>	
Relay	Relay output to carry capacity of 3A at 24VDC(5-pin M12 A-coding)
<b>Power</b>	
Redundant Input Power	Dual Power Inputs. 12~48 VDC on 5-pin M23 connector (24 VDC Typ.)
Power Consumption (Typ.)	8W
Overload Current Protection	Present
Reverse Polarity Protection	Present
<b>Physical Characteristics</b>	
Enclosure	IP-40

Dimensions (W x D x H)	125(W) x 65(D) x 196(H) mm (4.92 x 2.56 x 7.72 inch.)
Weight (g)	825 g
<b>Environmental</b>	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-10 to 60°C (14 to 140°F)
Operating Humidity	5% to 95% Non-condensing
<b>Regulatory Approvals</b>	
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	IEC60068-2-32
Vibration	IEC60068-2-6, EN61373
Rail Traffic	EN50155
Cooling	EN60068-2-1
Dry Heat	En60068-2-2
Safety	EN60950-1
Warranty	3 years

### Ordering Information

TAR-**A****B**0-M12

Code Definition	Wireless Mode	10/100Base-T(X) Port Number
<b>Option</b>	- <b>1:</b> IEEE 802.11 b/g - <b>2:</b> IEEE 802.11 a - <b>3:</b> IEEE 802.11 a/b/g - <b>4:</b> IEEE 802.11 b/g/n - <b>5:</b> IEEE 802.11 a/n - <b>6:</b> IEEE 802.11 a/b/g/n	- <b>"2"</b> : 2 ports

	Model Name	Description
<b>Available Model</b>	TAR-620-M12_US	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100 Base-T(X), US band
	TAP-620-M12_EU	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100 Base-T(X), EU band
	TAP-620-M12_JP	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100 Base-T(X), JP band
<b>Packing List</b>	<ul style="list-style-type: none"> <li>TAP-620-M12</li> <li>Antenna</li> <li>ORing Tool CD</li> <li>Quick Installation Guide</li> <li>Wall Mount</li> </ul>	<b>Optional Accessories (Can be purchased separately)</b> <ul style="list-style-type: none"> <li>DR-45 series : 45 Watts power supply</li> <li>DR-75 series : 75 Watts power supply</li> <li>DR-120 series : 120 Watts power supply</li> <li>RF Antenna Base series</li> <li>WLAN RF Antenna series</li> <li>RF Cable series</li> </ul>