TGAP-6620-M12

Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n Wireless AP with 2x10/100/1000Base-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 < 60ms**
- Support external SMA antenna installation
- Support AP/Client /Bridge /AP-Client Mode
- **Support Multiple-SSID to 4 SSID**
- Support MAC Filter
- Dual Gigabit Ethernet ports support Ethernet redundant mode (Recovery time < 10ms) and switch mode in M12 connector (A-coding)
- 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

TGAP-6620-M12 is a reliable WLAN Access Point with 2 Ethernet Gigabit ports and dual RF in IEEE 802.11 a/b/g/n wireless modules. It can be configured to operate in Dual AP/Dual Client /Bridge /AP-Client Mode. In combination with its IP-40 design and the superb management functionality, TGAP-6620-M12 provides a dust-tight connection and reverse 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 TGAP-6620-M12 by WEB interface via LAN port or WLAN interface. TGAP-6620-M12 can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. Therefore, TGAP-6620-M12 is one of the best communication solutions for wireless applications

Application

In practical operation of wireless access point, Windows utility (Open-Version) 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 Dual AP/Dual Client /Bridge /AP-Client Mode.

Pin Definition

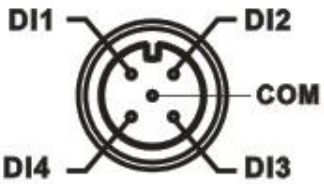
Relay Output

1A@24VDC

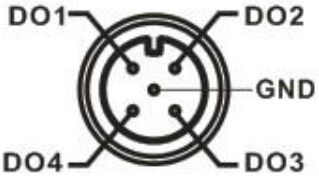
Console

RS-232, 115200bps, 8, N, 1

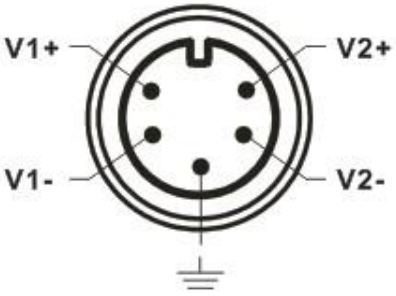
DI



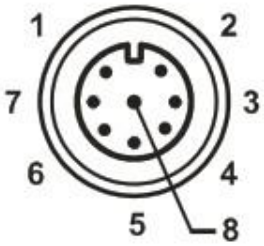
DO



Power

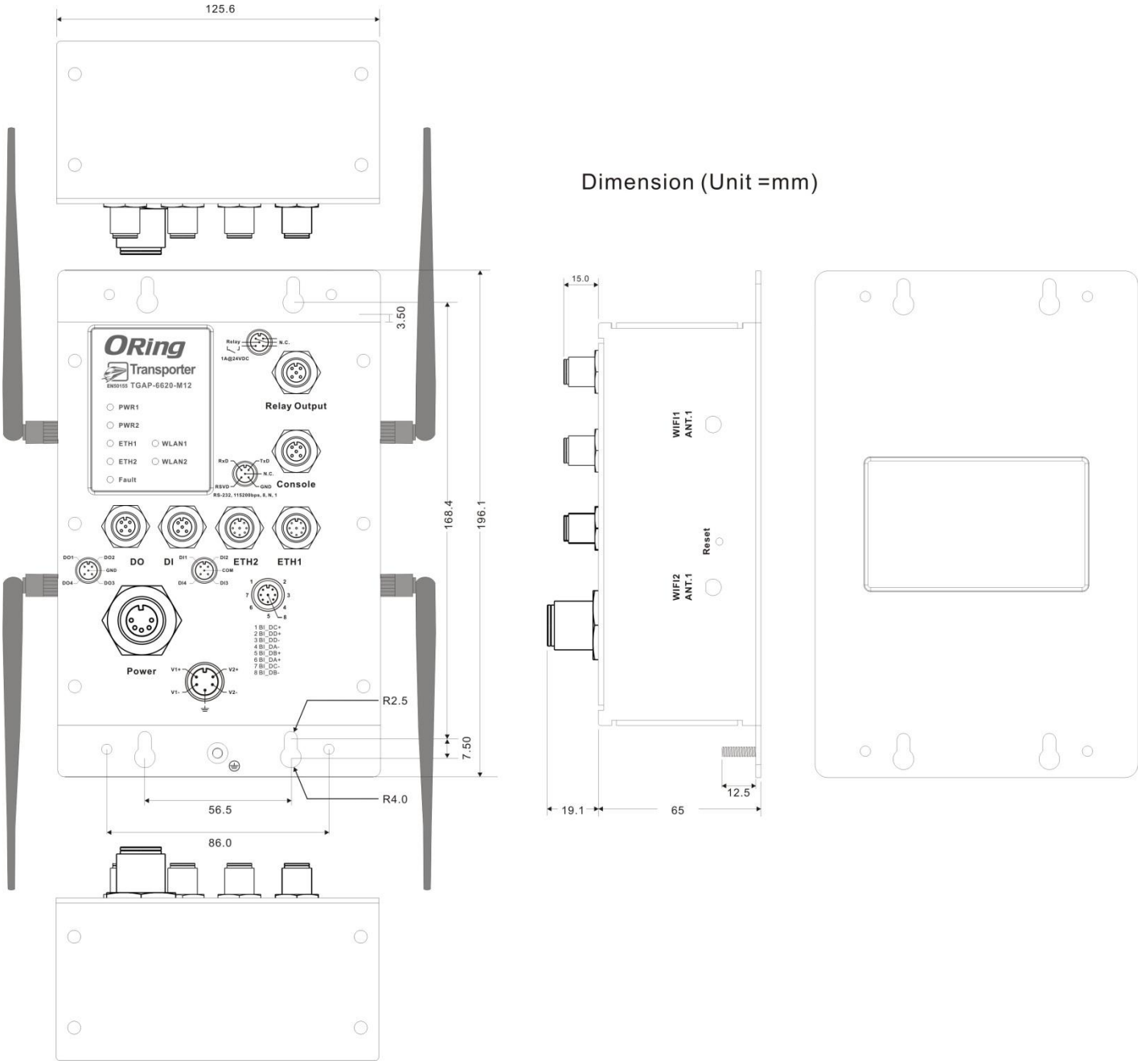


Ethernet



1 BI_DC+
2 BI_DD+
3 BI_DD-
4 BI_DA-
5 BI_DB+
6 BI_DA+
7 BI_DC-
8 BI_DB-

Dimension



Dimension (Unit =mm)

Specifications

ORing WLAN Access Point Model	TGAP-6620-M12
Physical Ports	
10/100/1000Base-T(X) Ports in M12 Auto MDI/MDIX (8-pin A-coding)	**2**
DIDO port in M12 (5-pin A-coding)	**2(DI x 4 and DO x 4)**
RS-232 Console port in M12 (5-pin A-coding)	**115200, 8 ,N ,1**
Relay port in M12 (5-pin A-coding)	**1A@24VDC**
WLAN interface	
Operating Mode	Dual AP/Dual Client /Bridge /AP-Client Mode
Antenna Connector	4 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 802.11b: 18dBm ± 1.5dBm 802.11g: 15dBm ± 1.5dBm 802.11gn HT20: 13dBm ± 1.5dBm@150Mbps 802.11gn HT40: 12dBm ± 1.5dBm@300Mbps 802.11an HT20: 12dBm ± 1.5dBm@150Mbps 802.11an HT40: 12dBm ± 1.5dBm@300Mbps
Receiver Sensitivity	802.11a: -68dBm ±2dBm@54Mbps 802.11b: -85dBm ±2dBm@11Mbps 802.11g: -68dBm ±2dBm@54Mbps 802.11gn HT20: -68dBm ±2dBm@150Mbps 802.11gn HT40: -68dBm ±2dBm@300Mbps 802.11an HT20: -68dBm ±2dBm@150Mbps 802.11an HT40: -68dBm ±2dBm@300Mbps
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
Protocol Support	
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP,
LED indicators	
Power indicator	2 x LEDs, Green for Power on
10/100/1000Base-T(X) indicator	2 x LEDs, Green for port Link/Act
WLAN LED	2 x LEDs, Green for WLAN Link /Act
Fault	1 x LED, Red for Ethernet link down or power down indicator
Fault contact	
Relay	Relay output to carry capacity of 1A at 24VDC(5-pin M12 A-coding)
Power	

Input power	Dual Power Inputs. 12~48 VDC
Power consumption (Typ.)	11Watts
Physical Characteristic	
Enclosure	IP-40
Dimension (W x D x H)	125.6(W) x 65(D) x 196.1(H) mm (4.94 x 2.55 x 7.72 inch.)
Weight (g)	965g
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, EN55011, EN50121-4)
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
Safety	EN60950-1
Warranty	5 years

Ordering Information

TGAP-ABC0-M12

Code Definition	Wireless-1 Mode	Wireless-2 Mode	10/100/1000 Base-T(X) Port Number
Option	**- 1:** 802.11 b/g **- 2:** 802.11 a **- 3:** 802.11 a/b/g **- 4:** 802.11 b/g/n **- 5:** 802.11 a/n **- 6:** 802.11 a/b/g/n	**- 1:** 802.11 b/g **- 2:** 802.11 a **- 3:** 802.11 a/b/g **- 4:** 802.11 b/g/n **- 5:** 802.11 a/n **- 6:** 802.11 a/b/g/n	**-"2":** 2 ports

	Model Name	Description
Available Model	**TGAP-6620-M12_US**	**Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000Base-T(X), US band**
	TGAP-6620-M12_EU	**Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000Base-T(X), EU band**

Packing List

- TGAP- 6620-M12 x 1
- CD x 1
- Quick Installation Guide x 1
- Wall Mount Kit x 1
- 2.4GHz/5GHz Antenna x 4

Optional Accessories

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