

TGAP-6620-M12 Series

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 with VLAN 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 Supports QoS (Quality of service) 1KV isolation for PoE P.D. port for TGAP-6620+-M12 Secured Management by HTTPS Event Warning by Syslog, Email, SNMP Trap, and Relay output Rigid IP-40 housing design Wall-mount enabled a/b/g/n

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. In addition, TGAP-6620+-M12 also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, TGAP-6620-M12 is one of the best communication solutions for wireless applications

Application

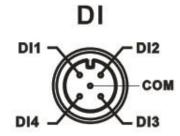
In practical operation of wireless access point, Windows utility (Open-Version) is supported. This utility is very helpful for you to search and configure IP of access point on the industrial network.

In addition, the wireless access point support various kinds of operation modes include Dual AP/Dual Client /Bridge /AP-Client Mode.

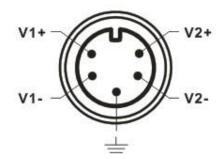
Pin Definition

Relay L 1A@24VDC

Relay Output



Power

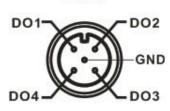


Console

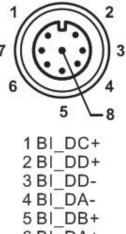


RS-232, 115200bps, 8, N, 1

DO

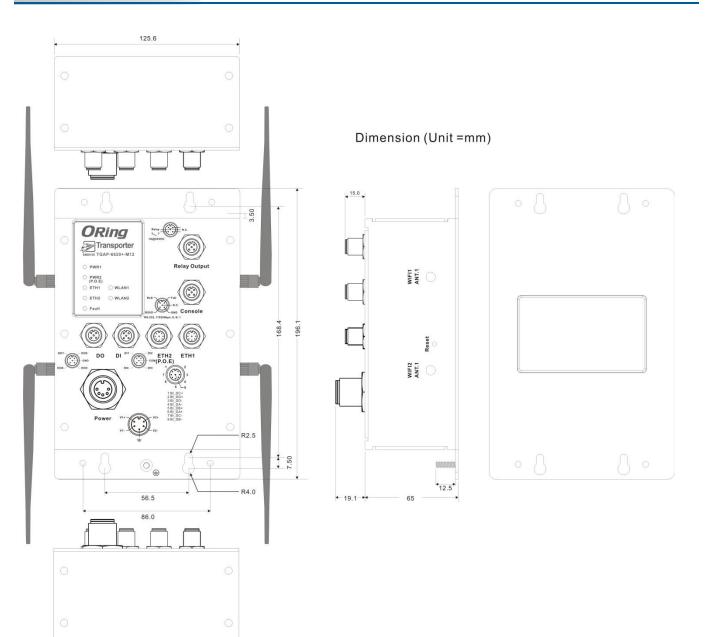


Ethernet



6 BI_DA+ 7 BI_DC-8 BI_DB-

Dimension



ORing WLAN Access Point Model	TGAP-6620-M12	TGAP-6620+-M12	
Physical Ports			
10/100/1000Base-T(X) Ports in M12	2 2(Present at ETH2		
Auto MDI/MDIX (8-pin A-coding)	2	Fully compliant with IEEE 802.3af PoE P.D)	
	2(DI x 4 and DO x 4) :		
DIDO port in M12 (5-pin A-coding)	Dry Contact: On: short to GND, Off: open		
	Wet Contact (DI to COM/GND):		
	On: 0 to 3VDC, Off: 10 to 30VDC		
RS-232 Console port in M12	115200 8 N 1		
(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 conr	nector	
Radio Frequency Type	DSSS, OFDM		
	IEEE802.11a : OFDM with BPSK, QPSK, QAM	I, 64QAM	
Modulation	IEEE802.11b: CCK, DQPSK, DBPSK		
	IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM		
	IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QA America / FCC : 2.412~2.462 GHz (11 chai		
	•	5~5.825 GHz (9 channels)	
Frequency Band	Europe CE / ETSI : 2.412~2.472 Ghz (13 channels)		
	5.180~5.240 GHz (4 char	nnels)	
Transmission Rate	IEEE802.11b: 1 / 2 / 5.5 / 11 Mbps	8 / 54 Mbpc	
	IEEE802.11a/g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps IEEE801.11n: up to 300Mbps		
	802.11a: 12dBm ± 1.5dBm@54Mbps		
	802.11b: 17dBm ± 1.5dBm@11Mbps		
	802.11g: 16dBm ± 1.5dBm@54Mbps		
Transmit Power	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		
	802.11a : -76dBm ± 2dBm@54Mbps		
	$802.11b : -85dBm \pm 2dBm@11Mbps$ $802.11g : -76dBm \pm 2dBm@54Mbps$		
Receiver Sensitivity	802.11gn HT20:-75dBm ± 2dBm@MCS7		
	802.11gn HT40:-72dBm ± 2dBm@MCS7		
	802.11an HT20:-74dBm ± 2dBm@MCS7		
	802.11an HT40:-71dBm ± 2dBm@MCS7 WEP: (64-bit ,128-bit key supported)		
	WPA/WPA2 :802.11i(WEP and AES encryptio	n)	
Encryption Security	WPAPSK (256-bit key pre-shared key supported)		
	802.1X Authentication supported		
Wireless Security	TKIP encryption SSID broadcast disable and enable		
Protocol Support			
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SN	TTP TCP LIDP RADIUS SNMD STD DSTD	
	אר אסט אר אווע אווער, אווע אווע, זיי אר אווע, אווע אווע, אווע אווע, אווע אווע, זיי אווע אווע אווע אווע אווע א	אווי, יכר, טער, אענטס, אוויור, סור, אסור, אוויר,	
LED indicators			
Power indicator	2 x LEDs, PW1:Green for DC Power on		
	PW2:Green for DC Power on or power by PoE		
10/100/1000Base-T(X) indicator	2 x LEDs, Green for port Link/Act		
WLAN LED	2 x LEDs, Green for WLAN Link /Act		
	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	11.5Watts
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	970g
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	IEC60068-2-31	
Vibration	IEC60068-2-6	
Safety	EN60950-1	
Warranty	5 years	

Ordering Information

ТGАР-АВС0С-M12					
Code Definition	Wireless-1 Mode	Wireless-2 Mode	10/100/1000 Base-T(X) Port Number	PoE Identification	
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	-"+": PoE P.D. present at ETH2	

Available Model TGAP- TGAP-	Model Name	Description
	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
	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), 1-port PoE P.D, 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), 1-port PoE P.D, EU band

Packing List

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