



TGAP-W610+-M12

**Industrial EN50155 IEEE 802.11 a/b/g/n AP
with 1x10/100/1000Base-T(X) PoE P.D., IP-67 grade**

Features

- **High Speed Air Connectivity:** RF in IEEE 802.11 a/b/g/n 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
- Support **Long Distance Air Connectivity**
- Support **Multiple-SSID to 4 SSID**
- Support X-Roaming < 60 ms
- Support wireless load balance
- Support external N-Type antenna installation
- Support **AP/ Client /Bridge /AP-Client Mode**
- Support **MAC/IP/Port Filter**
- Wireless connecting status monitoring
- Secured Management by HTTPS
- 1KV isolation for PoE P.D.
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-67 waterproof housing design



Introduction

TGAP-W610+-M12 is a reliable outdoor wireless Access Point with IEEE 802.11 a/b/g/n wireless modules and 1 Ethernet Gigabit port with PoE P.D.. It can be configured to operate in AP/ Client /Bridge /AP-Client Mode and supports MAC filters for security control. TGAP-W610+-M12 provides a dust-tight connection and four N-Type connectors that can install any N-Type antennas to extend communication distance. It is specifically designed for the toughest industrial environments. You are able to configure TGAP-W610+-M12 by WEB interface via LAN port or WLAN interface. In addition, TGAP-W610+-M12 also provides P.D. feature that is fully compliant with IEEE802.3af PoE P.D. specification to save the layout cost of power line. TGAP-W610+-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-W610+-M12 is one of the best communication solutions for wireless applications

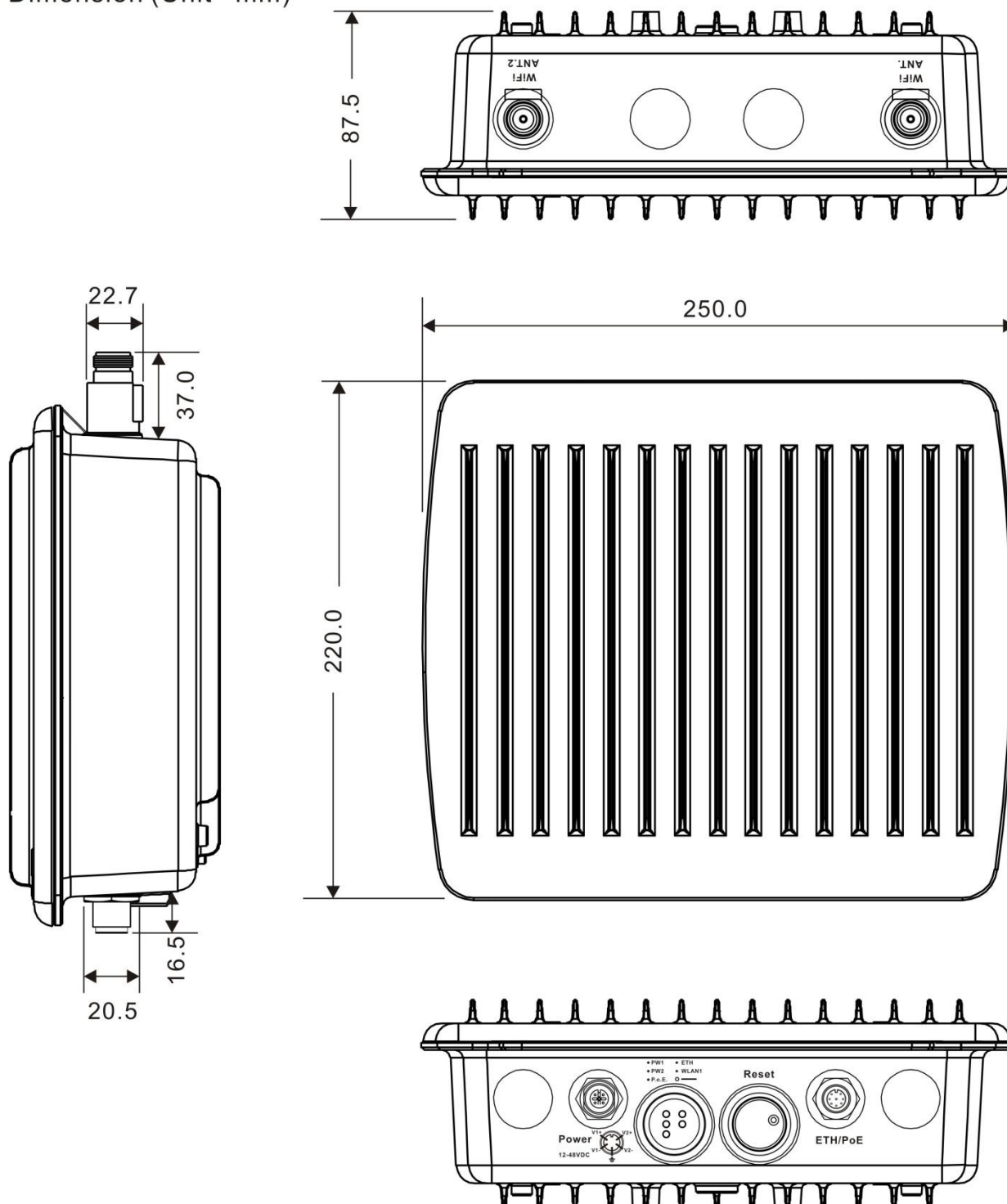
Application

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 AP/Dual Client /Bridge /AP-Client Mode.

Dimension

Dimension (Unit =mm)



Specifications

ORing WLAN Access Point Model	TGAP-W610+-M12
Physical Ports	
10/100/1000Base-T(X) Ports in M12 Auto MDI/MDIX (8-pin A-coding)	1
PoE P.D. port	Present at ETH Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance : 10 ⁸ ohms min
WLAN interface	
Operating Mode	P/Dual Client /Bridge /AP-Client Mode
Antenna Connector	2 x External N-Type female 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: 17dBm ± 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	3 x LEDs, PW1/PW2/PoE Green On : Power is on
10/100/1000Base-T(X) indicator	1 x LEDs, Green for port Link/Act
WLAN LED	1 x LEDs, Green for WLAN Link /Act
Power	
Input power	Dual Power Inputs. 12~48 VDC
Power consumption (Typ.)	9Watt
Physical Characteristic	
Enclosure	IP-67
Dimension (W x D x H)	310 (W) x 310(D) x 87 (H) (12.2 x 12.2 x 3.4 inch)

Weight (g)	3900g
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	IEC60068-2-32
Vibration	IEC60068-2-6, EN61373
Rail Traffic	EN50155
Cooling	EN60068-2-1
Dry Heat	EN60068-2-2
Safety	EN60950-1
Warranty	5 years

Ordering Information

TGAP-WAB0C-M12

Code Definition	Wireless-1 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": 1 ports	+ : PoE P.D.

Model Name		Description
Available Model	TGAP-W610+-M12_US	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., US band, IP-67 grade
	TGAP-W610+-M12_EU	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., EU band, IP-67 grade

Packing List

- **TGAP-W610+-M12 x 1**
- **CD x 1**
- **Quick Installation Guide x 1**
- **Wall Mount Kit x 1**
- **2.4GHz/5GHz Antenna x 2**

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**