



# TGAP-W6610+ Series

**Industrial EN50155 Dual RF in 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
- **Dual RF** for redundant wireless communication
- 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
- Rigid IP-67 waterproof housing design



## Introduction

TGAP-W6610+ is a reliable outdoor wireless Access Point with dual RF 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-W6610+ 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-W6610+ by WEB interface via LAN port or WLAN interface. In addition, TGAP-W6610+ 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-W6610+ can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. Therefore, TGAP-W6610+ is one of the best communication solutions for wireless applications

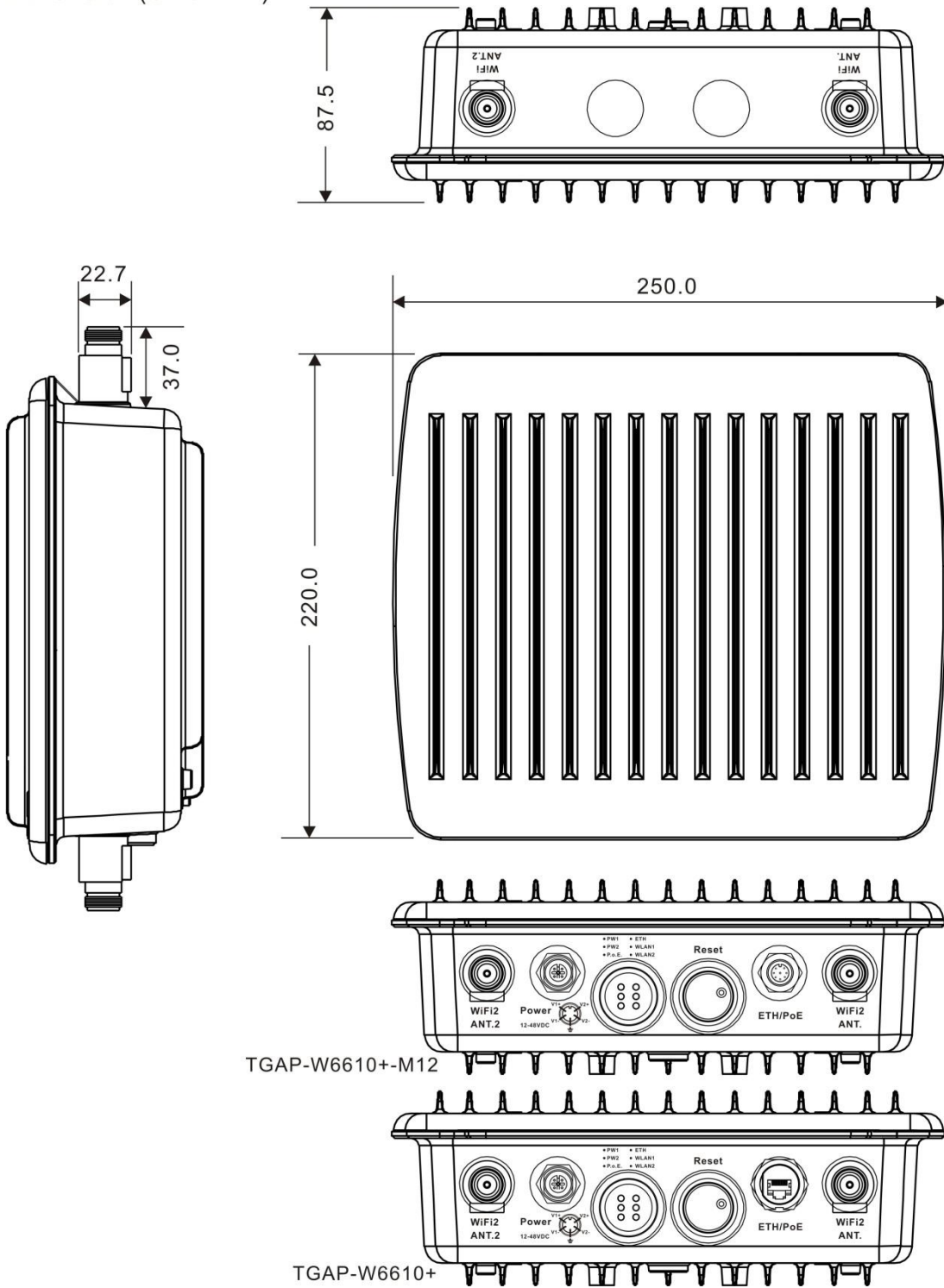
## Application

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-W6610+	TGAP-W6610+-M12
<b>Physical Ports</b>		
10/100/1000Base-T(X) Port Auto MDI/MDIX	<b>1</b> (RJ45)	<b>1</b> (M12 8-pin A-coding female)
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 <sup>8</sup> ohms min	
<b>WLAN interface</b>		
Operating Mode	Dual AP/Dual Client /Bridge /AP-Client Mode	
Antenna Connector	4 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@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 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	3 x LEDs, PW1/PW2/PoE Green On : Power is on and booting up	
10/100/1000Base-T(X) indicator	1 x LEDs, Green for port Link/Act	
WLAN LED	2 x LEDs, Green for WLAN Link /Act	
<b>Power</b>		
Input power	Dual Power Inputs. 12~48 VDC on M12 5-pin A-coding female	
Power consumption (Typ.)	11Watt	
<b>Physical Characteristic</b>		
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)	3980g
<b>Environmental</b>	
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
<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
<b>Warranty</b>	5 years

## Ordering Information

TGAP-W **A** **B** **C** **D** - **E** **E**

Code Definition	Wireless-1 Mode	Wireless-2 Mode	10/100/1000 Base-T(X) Port Number	PoE Identification	Connector Type
<b>Option</b>	- 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	- "1": 1 ports	+ : PoE P.D.	<b>None:</b> RJ45 <b>M12:</b> M12 connector

	Model Name	Description
<b>Available Model</b>	TGAP-W6610+_US	Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., IP-67 grade, EU band
	TGAP-W6610+_EU	Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., IP-67 grade, EU band
	TGAP-W6610+-M12_US	Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., M12 connector , IP-67 grade, EU band
	TGAP-W6610+-M12_EU	Industrial EN50155 Dual RF in IEEE 802.11 a/b/g/n wireless access point with 1x10/100/1000Base-T(X), PoE P.D., M12 connector , IP-67 grade, EU band

## Packing List

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- **TGAP- W6610+ x 1**
- **CD x 1**
- **Quick Installation Guide x 1**
- **Wall Mount Kit x 1**
- **2.4GHz/5GHz Antenna x 4**
- **Cable Gland x 1(TGAP-W6610+)**

## Optional Accessories

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- **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**