

### Features

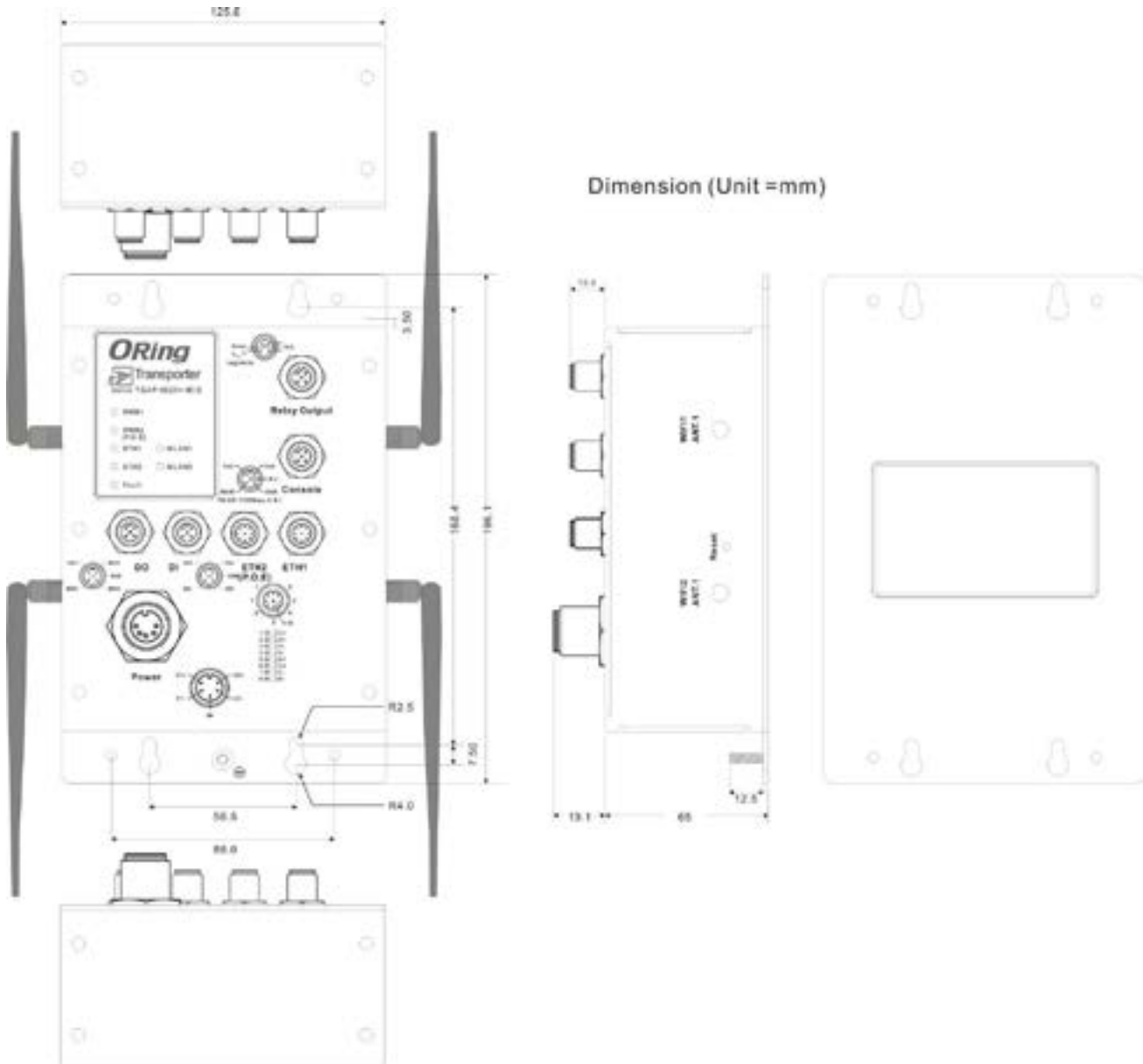
- Leading EN50155-compliant wireless access point for rolling stock application
- High Speed Air Connectivity: WLAN interface support up to 300 Mbps link speed
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- **Support X-Roaming < 60ms**
- 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



# TGAP-6620+-M12

IP-67/ EN50155 Wireless Access Point

## Dimension



### Specifications

| ORing WLAN Access Point Model                                    | TGAP-6620-M12  | TGAP-6620+-M12  |
|--|--|---|
| <b>Physical Ports</b>  |  |   |
| 10/100/1000Base-T(X) Ports in M12 Auto MDI/MDIX (8-pin A-coding) | <b>2</b>   | <b>2</b> (Present at ETH2 Fully compliant with IEEE 802.3af PoE P.D ) |
| DIDO port in M12 (5-pin A-coding)                                | <b>2(DI x 4 and DO x 4) :</b><br>Dry Contact:<br>On: short to GND, Off: open<br>Wet Contact (DI to COM/GND):<br>On: 0 to 3VDC, Off: 10 to 30VDC  |   |
| RS-232 Console port in M12 (5-pin A-coding)                      | <b>115200, 8 ,N ,1</b>   |   |
| Relay port in M12 (5-pin A-coding)                               | <b>1A@24VDC</b>  |   |
| <b>WLAN interface</b>  |  |   |
| 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<br>IEEE802.11b: CCK, DQPSK, DBPSK<br>IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM<br>IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QAM  |   |
| Frequency Band   | America / FCC : 2.412~2.462 GHz (11 channels)<br>5.180~5.240 GHz & 5.745~5.825 GHz ( 9 channels )<br>Europe CE / ETSI : 2.412~2.472 Ghz (13 channels)<br>5.180~5.240 GHz (4 channels)  |   |
| Transmission Rate  | IEEE802.11b: 1 / 2 / 5.5 / 11 Mbps<br>IEEE802.11a/g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps<br>IEEE801.11n: up to 300Mbps  |   |
| Transmit Power   | 802.11a: 12dBm ± 1.5dBm@54Mbps<br>802.11b: 17dBm ± 1.5dBm@11Mbps<br>802.11g: 16dBm ± 1.5dBm@54Mbps<br>802.11gn HT20: 15dBm ± 1.5dBm @MCS7<br>802.11gn HT40: 14dBm ± 1.5dBm @MCS7<br>802.11an HT20: 12dBm ± 1.5dBm @MCS7<br>802.11an HT40: 11dBm ± 1.5dBm @MCS7 |   |
| Receiver Sensitivity   | 802.11a : -76dBm ± 2dBm@54Mbps<br>802.11b : -85dBm ± 2dBm@11Mbps<br>802.11g : -76dBm ± 2dBm@54Mbps<br>802.11gn HT20:-75dBm ± 2dBm@MCS7<br>802.11gn HT40:-72dBm ± 2dBm@MCS7<br>802.11an HT20:-74dBm ± 2dBm@MCS7<br>802.11an HT40:-71dBm ± 2dBm@MCS7             |   |
| Encryption Security  | WEP: (64-bit ,128-bit key supported)<br>WPA/WPA2 :802.11i(WEP and AES encryption)<br>WPAPSK (256-bit key pre-shared key supported)<br>802.1X Authentication supported<br>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,<br>PW1:Green for DC Power on<br>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   |   |
| Fault  | 1 x LED, Red for Ethernet link down or power down indicator  |   |

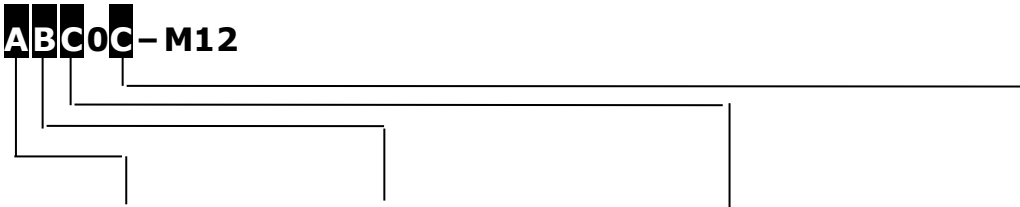
# TGAP-6620+-M12

## IP-67/ EN50155 Wireless Access Point

| 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

TGAP-**ABCOC**-M12



| Code Definition | Wireless-1 Mode  | Wireless-2 Mode  | 10/100/1000 Base-T(X) Port Number | PoE Identification              |
|-----------------|--|--|-----------------------------------|---------------------------------|
| <b>Option</b>   | - 1: 802.11 b/g<br>- 2: 802.11 a<br>- 3: 802.11 a/b/g<br>- 4: 802.11 b/g/n<br>- 5: 802.11 a/n<br>- 6: 802.11 a/b/g/n | - 1: 802.11 b/g<br>- 2: 802.11 a<br>- 3: 802.11 a/b/g<br>- 4: 802.11 b/g/n<br>- 5: 802.11 a/n<br>- 6: 802.11 a/b/g/n | - "2": 2 ports                    | - "+": PoE P.D. present at ETH2 |

|                        | Model Name        | Description  |
|------------------------|-------------------|--|
| <b>Available Model</b> | 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