TDGAP-830D+-M12X-WV series

Industrial EN50155 WIFI5 Access Point with 3x10/100/1000Base-T(X), M12 Connector

Features



- Leading **EN50155**-compliant wireless access point for rolling stock application
- High Speed Air Connectivity: WIFI5 interface support up to 867 Mbps link speed and WIFI6 up to 1733Mbps link speed.
- Highly Security Capability: WPA/WPA-PSK(TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Support external SMA antenna installation
- Support AP/Client Mode
- **Support Multiple-SSID to 4 SSID**
- Support MAC Filter
- Wireless connecting status monitoring
- Secured Management by HTTPS
- 1KV isolation for PoE P.D. port
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-40 housing design
- Wall mounting enabled



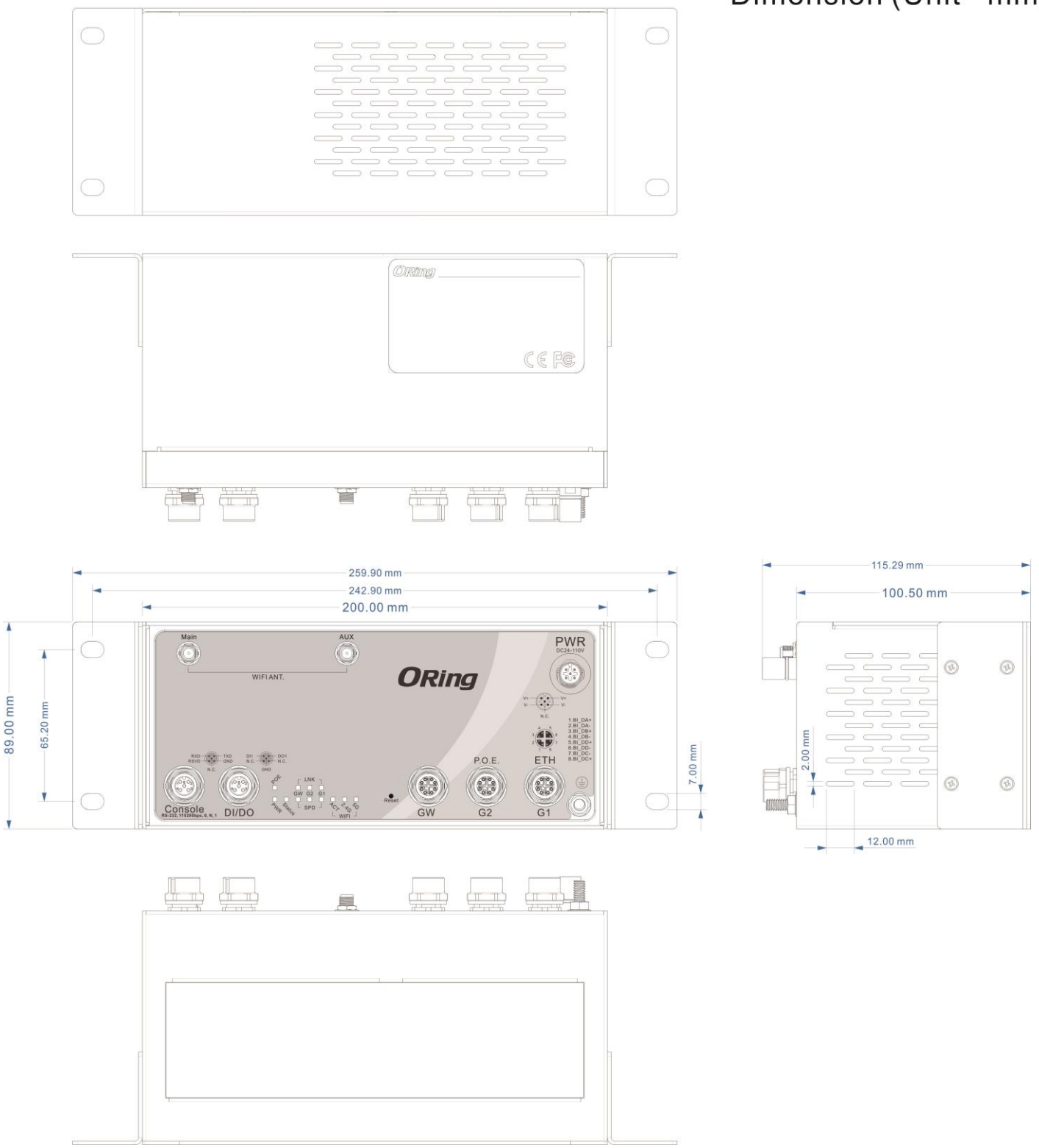
Introduction

ORing's Transporter™ series access point is designed for industrial and rolling stock wireless applications, such as vehicle, and railway applications. TDGAP-820D+-M12X-WV is a reliable WIFI5 WLAN Access Point with 3 Ethernet 10/100/1000 ports. It can be configured to operate in AP/Client Mode. TDGAP-820D+-M12X-WV provide a dust-tight connection and reverses 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 TDGAP-820D+-M12X-WV by WEB interface via LAN port or WLAN interface. TDGAP-820D+-M12X-WV can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. In addition, TDGAP-820D+-M12X-WV also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3at PoE P.D. specification. Therefore, TDGAP-820D+-M12X-WV is one of the best communication solutions for wireless applications.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

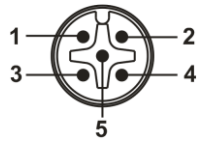
Dimension

Dimension (Unit =mm)



Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

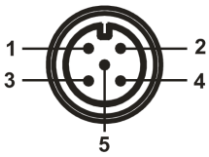
Pin Definition



A-coding

Male

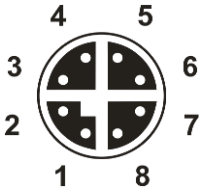
PWR M12 port	
Pin No.	Description
#1	V+
#2	V+
#3	V-
#4	V-
#5	N.C.



A-coding

Female

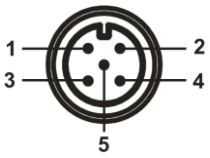
Console M12 port	
Pin No.	Description
#1	RXD
#2	TXD
#3	RSVD
#4	GND
#5	N.C.



X-coding

Female

10/100/1000Base-T(X) M12 port	
Pin No.	Description
#1	BI_DA+
#2	BI_DA-
#3	BI_DB+
#4	BI_DB-
#5	BI_DD+
#6	BI_DD-
#7	BI_DC-
#8	BI_DC+



A-coding

Female

DI/DO M12 port	
Pin No.	Description
#1	Digital Input
#2	Digital Output
#3	N.C.
#4	N.C.
#5	GND

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Specifications

ORing EN50155 Access Point Model	TDGAP-830D+-M12X-WV
Physical Ports	
10/100/1000Base-T(X) Ports in M12 (8-pin X-coding female)	**3(LAN)**
Console Port in M12 (5-pin A-coding female)	**1**
DI/DO Port in M12 (5-pin A-coding female)	**DI x 1, DO x 1** **(DI :Logic level 1: 5V~30V, Logic level 0: 0V~2V** **DO :Maximum Voltage is 30V, Maximum Current is 20mA)**
Input Power Port in M12 (5-pin A-coding male)	**1**
Antenna connector	
WIFI (for expansion)	2 x RP-SMA female
WLAN Interface	
Modulation	IEEE 802.11a: OFDM IEEE 802.11b: CCK, DQPSK, DBPSK IEEE 802.11g: OFDM IEEE 802.11n: BPSK, QPSK, 16-QAM, 64-QAM IEEE 802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM
Frequency Band	America / FCC: 2.412~2.462 GHz 5.180~5.240 GHz & 5.745~5.825 GHz Europe CE / ETSI: 2.412~2.472 GHz 5.180~5.240 GHz
Transmission Rate	IEEE 802.11b: 1/2/5.5/11 Mbps IEEE 802.11a/g: 6/9/12/18/24/36/48/54 Mbps IEEE 802.11n: UP to 300 Mbps IEEE 802.11ac: up to 867Mbps
Transmit Power	IEEE 802.11a: 12dBm ± 2dBm@54Mbps IEEE 802.11b: 18dBm ± 2dBm@11Mbps IEEE 802.11g: 15dBm ± 2dBm@54Mbps IEEE 802.11gn HT20: 14dBm ± 2dBm @MCS7 IEEE 802.11gn HT40: 14dBm ± 2dBm @MCS7 IEEE 802.11an HT20: 11dBm ± 2dBm @MCS7 IEEE 802.11an HT40: 10dBm ± 2dBm @MCS7 IEEE 802.11ac VHT80: 7dBm ± 2dBm @MCS9
Receiver Sensitivity	IEEE 802.11a : -71dBm ± 2dBm@54Mbps IEEE 802.11b : -86dBm ± 2dBm@11Mbps IEEE 802.11g : -72dBm ± 2dBm@54Mbps IEEE 802.11gn HT20:-68dBm ± 2dBm@MCS7 IEEE 802.11gn HT40:-66dBm ± 2dBm@MCS7 IEEE 802.11an HT20:-68dBm ± 2dBm@MCS7 IEEE 802.11an HT40:-67dBm ± 2dBm@MCS7 IEEE 802.11ac VHT80:-57dBm ± 2dBm@MCS9
Encryption Security	WEP: (64-bit ,128-bit key supported) WPA/WPA2 :802.11i(WEP and AES encryption) WPA-PSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption
Wireless Security	SSID broadcast disable
Protocol Support	
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP
LED Indicators	
PWR	1 x LED, Green for DC Power in
POE	1 x LED, Green for POE Power in
Ethernet Port Indicator	6 x LEDs, LNK: Green for port Link/AcT.

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

	SPD: Green On for 1000/100Base-T(X) link; Green Off for 10Base link
WLAN(Wifi) LED	3 x LEDs, 1 x LED, Green On: RF on, Blink: data transmitting 1 x LED, Green for WLAN work on 2.4GHz 1 x LED, Green for WLAN work on 5GHz
Status Indicator	1 x LED, Green slow blink for normal, off for system halt
Power	
Input Power	**24 ~ 110Vdc**
Isolation	DC 2KV/ AC 1.5KV
Power Consumption (Typ.)	25 watts Max.
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristic	
Enclosure	IP-30. (IP-40 for front face)
Dimension (W x D x H)	200(W) x 100(D) x 89(H) mm
Weight (g)	1170g
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, EN61373
Rail Traffic	EN50155
Cooling	EN60068-2-1
Dry Heat	EN60068-2-2
Safety	EN60950-1
Warranty	5 years

Ordering Information

	Model Name	Description
Available Model	**TDGAP-830D+-M12X-WV**	Industrial EN50155 WIFI5 Access Point with 3x10/100/1000Base-T(X), M12 Connector, US/EU band
	TDGAP-8830D+-M12X-WV	Industrial EN50155 Dual WIFI5 Access Point with 3x10/100/1000Base-T(X), M12 Connector, US/EU band

Packing List

- **TDGAP-830D+-M12X-WV x 1**
- **CD QRcode x 1**
- **Quick Installation Guide x 1**
- **Wall-Mount Kit x 2**

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000