

### TGAP-620-M12 Series

Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point 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
- 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
- 1KV isolation for PoE P.D. port for TGAP-620+-M12
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-40 housing design
- Wall-mount enabled





















#### Introduction

ORing's Transporter<sup>™</sup> series access point is designed for industrial and rolling stock wireless applications, such as vehicle, and railway applications. TGAP-620-M12 is a reliable 802.11 a/b/g/n WLAN Access Point with 2 Ethernet 10/100/1000 ports. It can be configured to operate in AP/Client /Bridge /AP-Client Mode. TGAP-620-M12 provides dual Ethernet ports in switch mode, so that you can use Daisy Chain to reduce the usage of Ethernet switch ports. TGAP-620-M12 provides 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 TGAP-620-M12 by WEB interface via LAN port or WLAN interface. TGAP-620-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-620+-M12 also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, TGAP-620-M12 is one of the best communication solutions for wireless applications.

#### Application

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

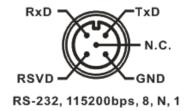
In addition, the wireless access point support various kinds of operation modes include AP/Client /Bridge /AP-Client Mode. You can build up the wireless network easily.

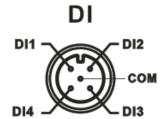
#### **Pin Definition**

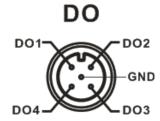
# **Relay Output**



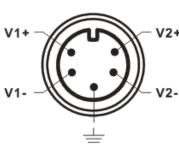
# Console



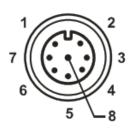






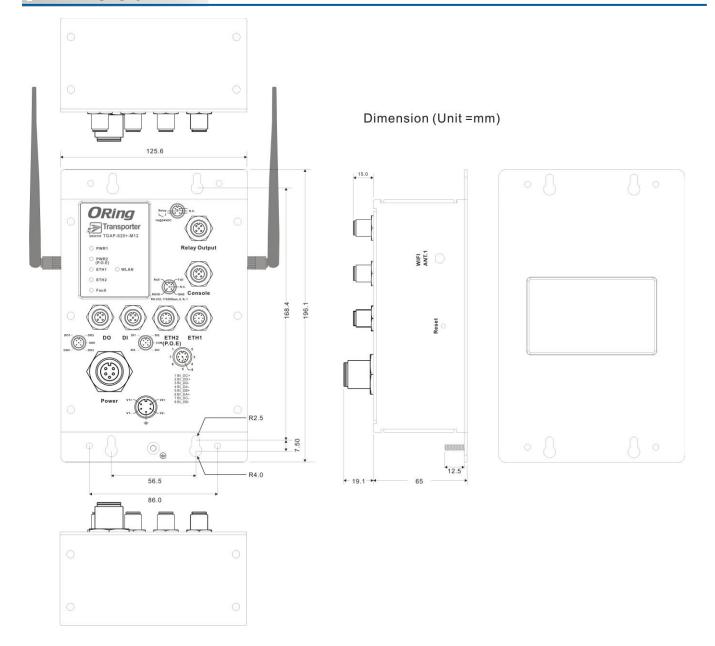


### **Ethernet**



- 1 BI\_DC+ 2 BI\_DD+ 3 BI\_DD-4 BI\_DA-5 BI\_DB+
- 6 BI\_DA+ 7 BI\_DC-8 BI\_DB-

### Dimension



# **Specifications**

TGAP-620-M12   TGAP	ORing WLAN Access Point			
Dilystost   Pots   Dilystost   Pots   In M12   Auto MDUMOX (6) pin A-coding)   2	_	TGAP-620-M12	TGAP-620+-M12	
10/100/1000Reset TQQ Ports in M12				
Auto MDI/MOIX (8-pin A-coding)   2   2(DI x 4 and D0 x 4)   1   1   1   1   1   1   1   1   1	-		2/Dracont at ETH2	
DIDO port in M12 (5-pin A-coding)	, ,	2	- ·	
DIDD port in M12 (5-pin A-coding)	/ acc / 152/ 1527 (6 piii / 1 ccaiiig)	2(DI x 4 and DO x 4):	. any compliant with 1222 002.5an 1 02 1 15 )	
Wet Contact (ID to COM/CNID):   On to 3 VDC, Off: 10 to 3 DVDC				
No. 0 to 3VDC, Off: 10 to 3WDC   Spin A coding    115200, 8, N, 1	DIDO port in M12 (5-pin A-coding)	On: short to GND, Off: open		
115200, S, N, 1				
Selay port in M12 (5-pin A-coding)   1A924VDC		On: 0 to 3VDC, Off: 10 to 30VDC		
Name	· ·	115200, 8 ,N ,1		
### WILAN Interface  Operating Mode	(3-pin A-county)			
Antenna Connector	Relay port in M12 (5-pin A-coding)	1A@24VDC		
Antenna Connector	WI AN Interface			
Antenna Connector  2 x External reverse SMA-type antenna connector  Radio Frequency Type  OFDM, DSSS  Modulation  IEEE802.11b: CCK/DQFSK/DBPSK  IEEE802.11m: BPSK, QPSK, 16-QAM, 64-QAM  IEEE802.11m: BPSK, QPSK, 16-QAM, 64-QAM  AmericAryCC: 2-412-2-42 Colft (21 channels)  5 .180-5.240 GHz (4 channels)  Frequency Band  802.11b: 13,55-2.40 GHz (4 channels)  802.11b: 13,55-2.40 GHz (4 channels)  802.11b: 13,54-3,8,3 c,4,18,12,9,6 Mbps  802.11b: 10,540-3,6 c,4,18,12,2,9,6 Mbps  802.1				
Radio Frequency Type	Operating Mode	AP/Bridge/Client/AP-Client		
IEEE802.11b: CCK/DQPSK/DBPSK   IEER802.11c/gc: OFDM   IEEE802.11c/gc: OFDM   IEEE802.11c/	Antenna Connector	2 x External reverse SMA-type antenna connector		
Modulation   IEEE802.11n/g: DFDM   IEEE802.11n/g: MPSK, QPSK, 16-QAM, 64-QAM   IEEE802.11n: MPSK, QPSK, 16-QAM, 64-QAM   America/FCC: 2412-2-4262 GHz (11 channels)   S.180-5.240 GHz & 5.745-5.825 GHz ( 9 channels )   Europe CE/FCTS: 2412-2-472 GHz (11 channels)   S.180-5.240 GHz & 4 channels )	Radio Frequency Type	OFDM, DSSS		
IEEE802_L11n: BPSK, QPSK, 16-QAM, 64-QAM		IEEE802.11b: CCK/DQPSK/DBPSK		
### America/FCC: 2.412~2.462 GHz (11 channels)  5.180~5;240 GHz & 5.745~5.25 GHz ( 9 channels )  Europe CE/EFIS: 4.12~2.472 CHE (13 channels)  5.180~5;240 GHz (4 channels )  802.11b: 11, 5.5, 2, 1 Mbps;  802.11b: 12, 568 mb, 1.588m@54Mbps  802.11b: 1788m ± 1.588m@54Mbps  802.11g: 1688m ± 1.588m@54Mbps  802.11g: 1688m ± 1.588m@54Mbps  802.11g: 1788m ± 1.588m@54Mbps  802.11g: 1788m ± 1.588m@MCS7  802.11an HT40: 1188m ± 1.588m @MCS7  802.11an HT40: 1188m ± 1.588m @MCS7  802.11an HT40: 1188m ± 1.588m @MCS7  802.11b: 8568m ± 288m@1Mbps  802.11b: 8568m ± 288m@1Mbps  802.11b: 8568m ± 288m@1Mbps  802.11c: 1568m ± 288m@54Mbps  802.11g: 17868m ± 288m@MCS7  802.11g: HT40: 7268m ± 288m@MCS7  802.11an HT40: 7168m ± 288m@MCS7  802.11an HT40	Modulation	IEEE802.11a/g: OFDM		
S.180~5,240 GHz & 5.745~5.825 GHz ( 9 channels )   Europe CE/ETSI: 2.412~2.472 GHz (13 channels )   Europe CE/ETSI: 2.412~2.472 GHz (13 channels )   S.180~5,240 GHz (2 channels )   S.180~5,240 GHz (2 channels )   S.21.111; 1,5.5, 2, 1 Mbps;   S.21.111; 1,5.5, 3, 6, 24, 18, 12, 9, 6 Mbps   S.21.111; 1,5.5, 2, 1 Mbps;   S.21.111; 1,5.		<u> </u>		
Europe CE/FTSI: 2.412~2.472 GHz (13 channels)			He ( O sharrada )	
S1.80 - S2.24	Frequency Band		HZ ( 9 channels )	
Receiver Sensitivity				
802.11n: up to 300Mbps				
802.11a: 12dBm ± 1.5dBm@54Mbps   802.11b: 17dBm ± 1.5dBm@51Mbps   802.11b: 17dBm ± 1.5dBm@54Mbps   802.11g: 15dBm ± 1.5dBm@54Mbps   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT20: 12dBm ± 1.5dBm @MCS7   802.11an HT20: 12dBm ± 1.5dBm @MCS7   802.11an HT40: 11dBm ± 1.5dBm @MCS7   802.11an HT40: 11dBm ± 1.5dBm @MCS7   802.11an HT40: 12dBm ± 2dBm@54Mbps   802.11b: 15dBm # 2dBm@54Mbps   802.11g: 15dBm ± 2dBm@54Mbps   802.11g: 15dBm ± 2dBm@54Mbps   802.11gn HT20: 75dBm ± 2dBm@MCS7   802.11an HT40: 72dBm ± 2dBm@MCS7   802.11an HT40: 71dBm ± 2dBm@MCS7   802.11an HT40:	Transmission Rate	802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps		
802.11b: 17dBm ± 1.5dBm@11Mbps   802.11g: 16dBm ± 1.5dBm@054Mbps   802.11g: 17dBm ± 1.5dBm@MCS7   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT40: 14dBm ± 1.5dBm @MCS7   802.11gn HT40: 11dBm ± 1.5dBm @MCS7   802.11gn HT40: 11dBm ± 1.5dBm @MCS7   802.11g: -76dBm ± 2dBm@54Mbps   802.11g: -76dBm ± 2dBm@54Mbps   802.11g: -76dBm ± 2dBm@14Mbps   802.11gn HT20: -72dBm ± 2dBm@MCS7   802.11gn HT20: -72dBm ± 2dBm@MCS7   802.11gn HT20: -72dBm ± 2dBm@MCS7   802.11gn HT20: -74dBm ± 2dBm@MCS7   802.11gn HT30: -74dBm ± 2dBm@MCS7   80		802.11n: up to 300Mbps		
### 1.5dBm ± 1.5dBm @54Mbps ### 1.5dBm @MCS7 ### 1.5dBm ## 1.5dBm @MCS7 ### 1.5dBm ## 1.5dBm @MCS7 ### 1.5dBm # 1.5dBm @MCS7 ### 1.5dBm ## 1.5dBm @MCS7 ### 1.5dBm ## 1.5dBm @MCS7 ### 1.5dBm ### 1.5dBm @MCS7 ### 1.5dBm ### 1.5dBm @MCS7 ### 1.5dBm		•		
Transmit Power   802.11gn HT20: 15dBm ± 1.5dBm @MCS7   802.11gn HT40: 14dBm ± 1.5dBm @MCS7   802.11gn HT40: 14dBm ± 1.5dBm @MCS7   802.11an HT40: 11dBm ± 1.5dBm @MCS7   802.11an HT40: 11dBm ± 1.5dBm @MCS7   802.11a: 76dBm ± 2dBm@S4Mbps   802.11b: -85dBm ± 2dBm@54Mbps   802.11g: -76dBm ± 2dBm@54Mbps   802.11g: -76dBm ± 2dBm@MCS7   802.11gn HT20:-73dBm ± 2dBm@MCS7   802.11gn HT20:-74dBm ± 2dBm@MCS7   802.11gn HT20:-74dBm ± 2dBm@MCS7   802.11gn HT20:-74dBm ± 2dBm@MCS7   802.11gn HT40:-74dBm ± 2dBm@MCS7   802.11gn HT40:-75dBm ± 2dBm@MCS7		•		
802.11gn HT40: 14dBm ± 1.5dBm @MCS7	Transmit Power			
802.11an HT40: 12dBm ± 1.5dBm @MCS7	Transmit Fower			
802.11a : -76dBm ± 2dBm@54Mbps 802.11b : -85dBm ± 2dBm@11Mbps 802.11g : -76dBm ± 2dBm@MCS7 802.11g HTZ0:-75dBm ± 2dBm@MCS7 802.11g HT40:-72dBm ± 2dBm@MCS7 802.11g HT40:-72dBm ± 2dBm@MCS7 802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7  WEP: (64-bit, 1,28-bit key) WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  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 1 x LED, Green for WLAN Link/Act  Fault 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)		-		
Receiver Sensitivity  802.11g : -76dBm ± 2dBm@11Mpps 802.11g : -776dBm ± 2dBm@MCS7 802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11an HT40:-72dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7  WEP: (64-bit ,128-bit key) WPA/WPA2 PSK : TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  2 x LEDs, 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 WLAN Link/Act  WLAN LED  1 x LED, Red for Ethernet link down or power down indicator  Fault 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)		802.11an HT40: 11dBm ± 1.5dBm @MCS7		
Receiver Sensitivity  802.11g: -76dBm ± 2dBm@54Mbps  802.11gn HT20:-75dBm ± 2dBm@MCS7  802.11gn HT20:-72dBm ± 2dBm@MCS7  802.11gn HT20:-71dBm ± 2dBm@MCS7  802.11an HT20:-71dBm ± 2dBm@MCS7  802.11an HT20:-71dBm ± 2dBm@MCS7  WEP: (64-bit ,128-bit key)  WPA/WPA2 PSK: TKIP and AES encryption (802.11i)  802.11x/RADIUS Authentication supported  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  2 x LEDs,				
Receiver Sensitivity  802.11gn HT20:-75dBm ± 2dBm@MCS7 802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-72dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7  WEP: (64-bit ,128-bit key) WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault Relay Relay output to carry capacity of 1A at 24VDC(5-pin M12 A-coding)				
802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7  WEP: (64-bit, 128-bit key) WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act Fault 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)	Receiver Sensitivity			
802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 2dBm@MCS7 WEP: (64-bit ,128-bit key) WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported 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  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 WLAN Link/Act WLAN LED 1 x LED, Green for WLAN Link/Act Fault 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)	Receiver Sensitivity			
WEP: (64-bit ,128-bit key)  WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  2 x LEDs, Power Indicator  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 WLAN Link/Act  WLAN LED  1 x LED, Green for WLAN Link/Act  Fault  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)				
Encryption Security  WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported  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  2 x LEDS, Power Indicator  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  1 x LED, Green for WLAN Link/Act  Fault  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)		802.11an HT40:-71dBm ± 2dBm@MCS7		
802.1X/RADIUS Authentication supported  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  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault 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)		• • • • • • • • • • • • • • • • • • • •		
Wireless Security  Protocol Support  Protocol ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP,  LED Indicators  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault 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)	Encryption Security		i)	
Protocol Support  Protocol ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP,  LED Indicators  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault 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)	Wineless Consumity			
Protocol  ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP,  LED Indicators  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault 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)	,	Droadcast disable and enable		
LED Indicators  2 x LEDs, Power Indicator 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 1 x LED, Green for WLAN Link/Act  Fault 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)	Protocol Support			
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 1 x LED, Green for WLAN Link/Act  Fault 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)	Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TC	CP, UDP, RADIUS, SNMP, STP, RSTP,	
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  1 x LED, Green for WLAN Link/Act  Fault  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)	LED Indicators			
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 1 x LED, Green for WLAN Link/Act  Fault 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)		2 x LEDs,		
10/100/1000Base-T(X) Indicator  2 x LEDs, Green for port Link/Act  WLAN LED  1 x LED, Green for WLAN Link/Act  Fault  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 Indicator			
WLAN LED  1 x LED, Green for WLAN Link/Act  Fault  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)		PW2:Green for DC Power on or power by PoE		
Fault 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)	10/100/1000Base-T(X) Indicator	2 x LEDs, Green for port Link/Act		
Relay Relay output to carry capacity of 1A at 24VDC(5-pin M12 A-coding)	WLAN LED	1 x LED, Green for WLAN Link/Act		
Relay Relay output to carry capacity of 1A at 24VDC(5-pin M12 A-coding)	Fault	1 x LED, Red for Ethernet link down or power down indicator		
Relay Relay output to carry capacity of 1A at 24VDC(5-pin M12 A-coding)	Fault Contact			
		Polary output to carry capacity of 1A at 24/DC/E ==	n M12 A-coding)	
Power		neigy output to carry capacity of 1A at 24VDC(5-pi	THE A-COUNTY)	
	Power			

Redundant Input Power	Dual Power Inputs. 12~48 VDC on 5-pin M23 connector (24 VDC Typ.)	
Power Consumption (Typ.)	8W 8.5W	
Overload Current Protection	Present	
Reverse Polarity Protection	Present	
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)	955g 960g	
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	IEC60068-2-31	
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



Code Definition	Wireless 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	-"2": 2 ports	-"+": PoE P.D. present at ETH2

	Model Name	Description
	TGAP-620-M12_US	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), US band
Available Model	TGAP-620-M12_EU	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), EU band
	TGAP-620+-M12_US	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), 1-port PoE P.D, US band
	TGAP-620+-M12_EU	Industrial EN50155 IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000  Base-T(X), 1-port PoE P.D, EU band

### Packing List

• TGAP-620-M12 x 1

• CD x 1

Quick Installation Guide x 1

• 2.4GHz/5GHz Antenna x 2

## **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