

IAR-7002-WA/WA+

>> Industrial 802.11a/b/g Wireless VPN Router

- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Support IEEE802.11 a/b/g standard.
- Provide HNAT enhance LAN to WAN routing performance
- Highly Security Capability : WEP/WPA/WPA-PSK(TKIP,AES) / WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- USB interface support 3.5G HSDPA USB Modem dial up
- Support VPN for secured network connection
- Redundant Power Inputs: 12~48VDC on terminal block
- Fully Compliant with IEEE802.3af (Power Device at ETH2, IAR-7002-WA+)
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- Support LLDP (802.1AB) for topology view(OPEN-Vision)
- Support STP(802.1D) for wireless/wired redundancy



> Features

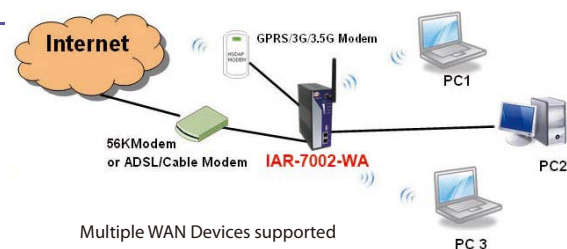
- WLAN interface support up to 54Mbps link speed
- Various kind of encryption supported: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/ WPA2-PSK(TKIP,AES)/802.1X Authentication
- Various kind of WAN Connection Type supported: Dynamic/Static IP, PPPoE, Modem/3G.
- Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)
- Ethernet switch mode enable Daisy Chain
- Wireless connecting status monitoring
- Versatile modes & event alarm by e-mail
- IP table to prevent access from unauthorized IP address
- Support VPN Setting (Open VPN , PPTP VPN)
- Support NAT Setting (Virtual Server , Port Trigger , DMZ , UPnP)
- 1KV isolation for PoE PD port of IAR-7002-WA+
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

> Introduction

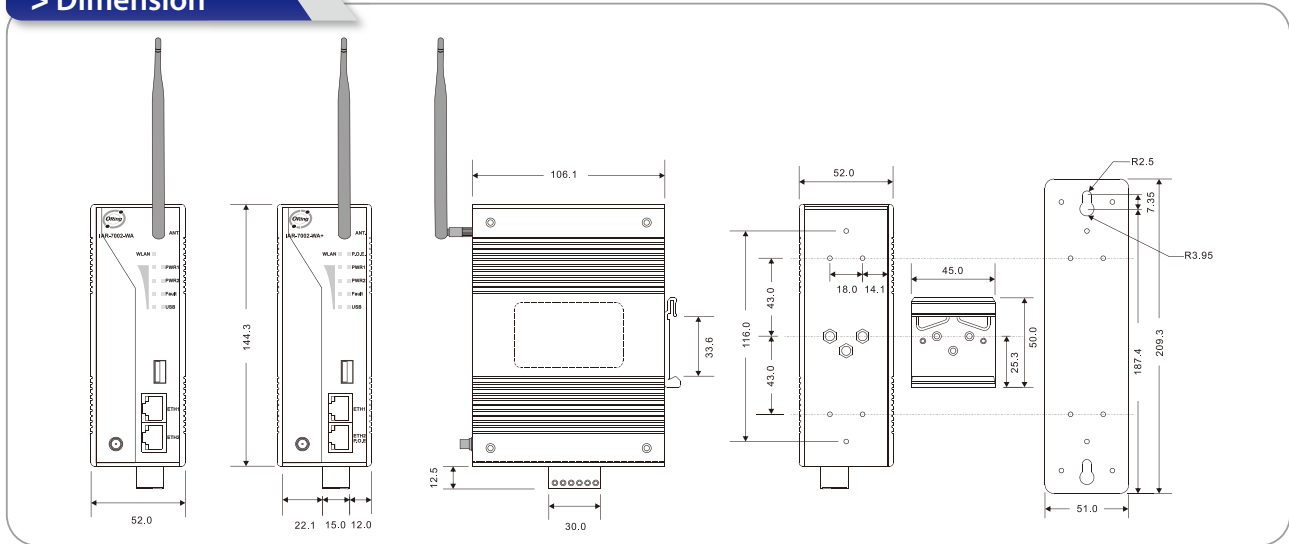
IAR-7002-WA/WA+ is a reliable 802.11a/b/g WLAN Access Point with 2 ports 10/100Base-T(X)X ports router where ETH1 for LAN ETH2 for WAN. It supports LLDP for topology discovery and STP for wireless/wired redundant connections. It also supports 802.1X and MAC filter for security control. It could be configured to operate in 3 modes of routing function: Dynamic/Static IP route, PPPoE authentication, and Modem (56K/GPRS/3G/3.5G Modem) dial up. In the mode of Modem dial up, it support both traditional 56K modem and GPRS/3G/3.5G Modem with USB interface. Users can set up WLAN environment to fulfill demands of various applications rapidly by dialing up cellular modems. In addition, IAR-7002-WA+ also provides PD feature on ETH2 which is fully compliant with IEEE802.3af PoE PD specification. This feature extends the layout up to 100 meters. Therefore, IAR-7002-WA/WA+ are one of the best solution for applications of wireless communication.

> Application

In IAR-7002-WA/WA+, there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up. IAR-7002-WA/WA+ also support NAT, VPN and Back up functions. You can build up the wireless network and connect to the Internet easily.



> Dimension



Unit=mm

> Specifications

ORing AP Router Model	IAR-7002-WA	IAR-7002-WA+
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX		2
PoE PD port	-	Present at ETH2 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
USB Host port	1x USB 2.0 Host port	
Wlan Interface		
WAN Connection Type	Static/Dynamic IP / PPPoE / Modem (56K/GPRS/G/3G/3.5G Modem) dial up	
Antenna Connector	Reverse SMA	
Radio Frequency Type	DSSS	
Modulation	IEEE802.11a : OFDM with BPSK, QPSK, 16QAM, 64QAM OFDM@54 Mbps, CCK@11/5.5 Mbps, DQPSK@2 Mbps, DBSK@1 Mbps IEEE802.11b : CCK, DQPSK, DBPSK IEEE802.11g : OFDM with BPSK, QPSK, 16QAM, 64QAM	
Frequency Band	America / FCC : 2.412~2.462 GHz (11 channels) 5.15 to 5.825 GHz (13 channels) Europe CE / ETSI : 2.412~2.472 GHz (13 channels) 5.15 to 5.724 GHz (19 channels)	
Transmission Rate	IEEE802.11b : 1/ 2/ 5.5/ 11 Mbps IEEE802.11a/g : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps	
Transmit Power	IEEE802.11a/b/g: 18dBm	
Receiver Sensitivity	-81dBm @ 11Mbps, PER< 8%; -64dBm @ 54Mbps, PER< 10%	
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	

LED indicators	
Power Indicator	PWR 1(2)(PoE) / Ready : Red On : Power is on and booting up. Green On : Power is on and functioning Normally.
10/100Base-T(X)X RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.
WLAN LEDs:	WLAN Link /ACT : Green: Link, Orange: Poor signal WLAN Strength: 1<25%, 2<50%, 3<75%, 4<100%
Fault	Red: Ethernet link down or power down
Fault contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block
Power consumption (Typ., USB Modem not included)	6 Watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	52(W) x 106.1(D) x 144.3(H) mm (2.05x4.18x5.68 inch.)
Weight (g)	803 g
	807 g
Environmental	
Storage Temperature	-40 to 85°C(-40 to 185°F)
Operating Temperature	-10 to 55°C (14 to 131°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
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
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950
Warranty	3 years

> Ordering Information

IAR-7002- **AA** **B**

Code Definition	WLAN Identification	PoE Identification
Option	- WA : IEEE802.11 a/b/g mode	- + : PoE PD present at ETH2

Available Model	Model Name	Description
	IAR-7002-WA	Industrial 802.11 a/b/g Wireless VPN Router
	IAR-7002-WA+	Industrial 802.11 a/b/g Wireless VPN Router with 1-port PoE PD