

# IAR-7002-WG/WG+

## >> Industrial 802.11b/g Access Point 3.5G VPN Router

- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Provide HNAT enhance LAN to WAN routing performance
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/WPA2-PSK(TKIP,AES)/Radius 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-WG+)
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper



## > Features

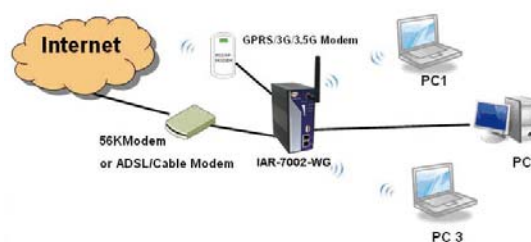
- WLAN interface support up to 54Mbps link speed
- Various kind of encryption supported: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/ WPA2-PSK(TKIP,AES)/Radius
- Various kind of WAN Connection Type supported: Dynamic/Static IP, PPPoE, Modem/3G.
- Dual redundant Ethernet port support redundant mode (Recovery time < 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-WG+
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

## > Introduction

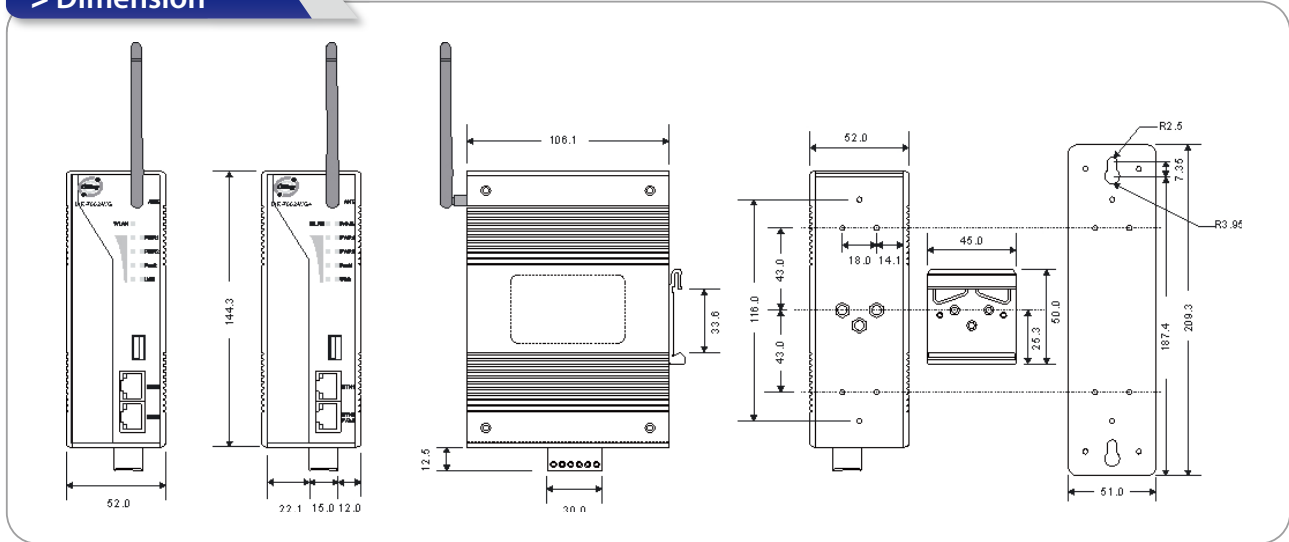
IAR-7002-WG/WG+ is a reliable 802.11b/g WLAN Access Point with 2 ports 10/100Base-T(X)X ports router where ETH1 for LAN ETH2 for WAN. It could be configured to operate in 3 modes of routing function: Dynamic/Static IP route, PPPoE authentication, and Modem (56K/GPRS/3G/3.5G Modem) dial up. In the mode 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-WG+ 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-WG/WG+ are one of the best solution for applications of wireless communication.

## > Application

In IAR-7002-WG/WG+, there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up. IAR-7002-WG/WG+ 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-WG	IAR-7002-WG+
<b>Physical Ports</b>		
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 <sup>8</sup> ohms min
USB Host port	1x USB 2.0 Host port	
<b>Wlan Interface</b>		
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	IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM	
Frequency Band	America/FCC: 2.412~2.462 GHz (11 channels) Europe CE/ETSI: 2.412~2.472 Ghz (13 channels)	
Transmission Rate	IEEE802.11b: 1/ 2/ 5.5/ 11 Mbps IEEE802.11g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps	
Transmit Power	IEEE802.11b/g: 18dBm	
Receiver Sensitivity	-81 dBm @ 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) Radius supported TKIP encryption	
Wireless Security	SSID broadcast disable	
<b>Modem Support</b>		
List	Verizon modem AT&T modem Huawei E220, E260 modem Simens 3.5G modem Support other models by request	

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
<b>Warranty</b>	3 years

> Ordering Information

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

Code Definition	WLAN Identification	PoE Identification
<b>Option</b>	- <b>WG</b> : IEEE802.11 b/g mode	- " <b>+</b> ": PoE PD present at ETH2

Available Model	Model Name	Description
	IAR-7002-WG	Industrial 802.11 b/g 3.5G VPN Router
	IAR-7002-WG+	Industrial 802.11 b/g 3.5G VPN Router with 1-port PoE PD