



# IAR-620 / IAR-620+

## Industrial IEEE 802.11 a/b/g/n Cellular VPN Router

### Features

- High Speed Air Connectivity: WLAN interface support up to 300Mbps link speed
- 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
- Secured Management by HTTPs
- Support STP(802.1D) for wireless redundancy
- Various kind of WAN Connection Type supported: Dynamic/Static IP, PPPoE, Modem/Dial Up
- Support client operating mode
- IP table to prevent access from unauthorized IP address
- Support VPN for secured network connection (Open VPN , PPTP VPN)
- Support NAT Setting (Virtual Server , Port Trigger , DMZ , UPnP)
- Support DHCP forwarder through PPTP function
- 3G Modem signal information display (un-connecting status)
- Wireless connecting status monitoring
- Versatile modes & event alarm by e-mail
- USB interface support 3.5G HSDPA USB Modem dial up
- 1KV isolation for PoE P.D. port of IAR-620+
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- Rigid IP-30 housing design
- DIN-Rail and Wall-mount enabled



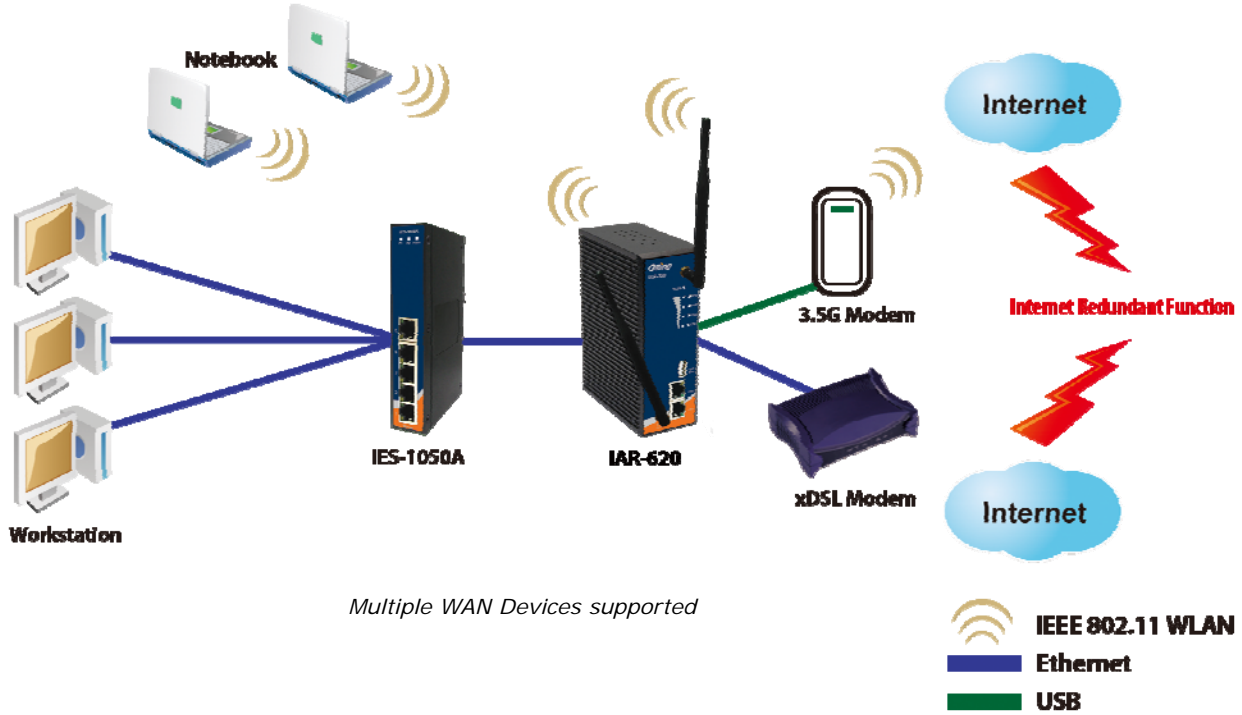
### Introduction

IAR-620 / IAR-620+ is a reliable IEEE 802.11 a/b/g/n WLAN VPN router with 2 ports 10/100Base-T(X) router where ETH1 for LAN and ETH2 for WAN. It 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-620+ also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af

PoE P.D. specification. This feature extends the layout up to 100 meters. Therefore, IAR-620 / IAR-620+ is one of the best solution for applications of wireless communication.

## Application

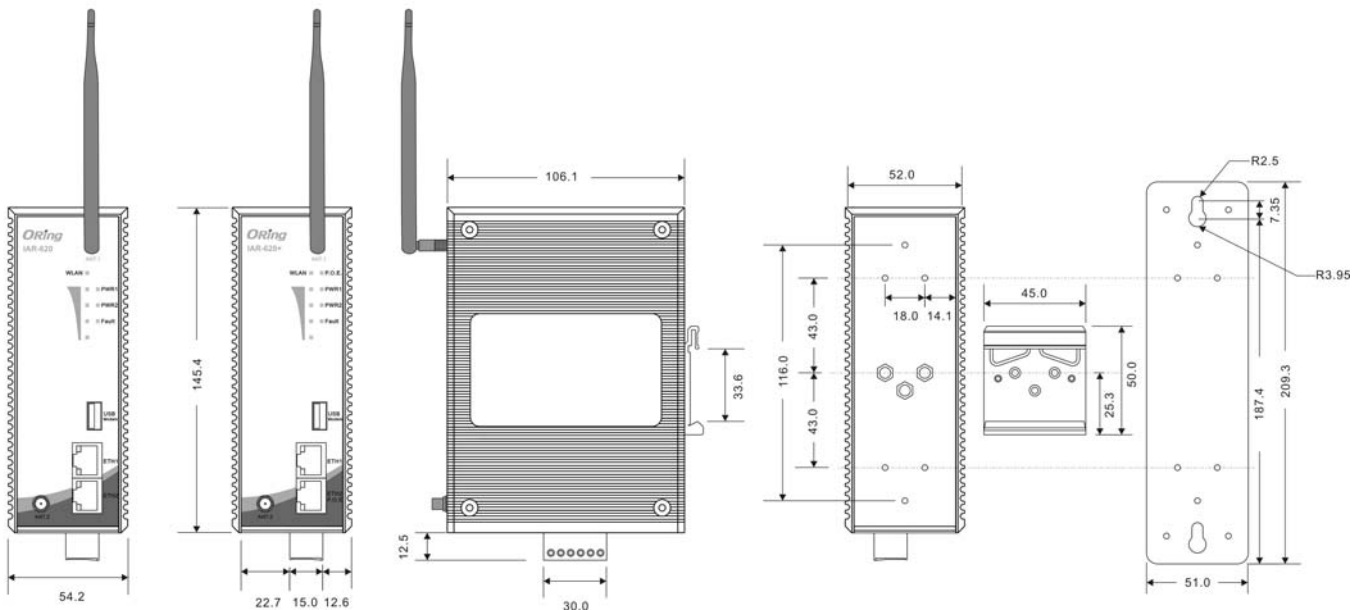
In IAR-620 / IAR-620+, there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up. IAR-620 / IAR-620+ also support NAT, VPN and Back up functions. You can build up the wireless network and connect to the Internet easily.



Multiple WAN Devices supported

## Dimension

Dimension (Unit =mm)



## Specifications

ORing AP Router Model	IAR-620	IAR-620+
<b>Physical Ports</b>		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2	
PoE P.D. 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/3G/3.5G Modem) dial up	
Antenna Connector	Reverse SMA x 2	
Radio Frequency Type	DSSS	
Modulation	IEEE802.11a/n: OFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g/n: OFDM with BPSK, QPSK, 16QAM, 64QAM	
Frequency Band	America / FCC: 2.412~2.462 GHz (11 channels ) 5.180~5.240 GHz & 5.745~5.825 GHz ( 9 channels ) Europe CE / ETSI: 2.412~2.472 GHz ( 13 channels ) 5.180~5.240 GHz ( 4 channels ) Japan(JP): 2.412~2.484 GHz ( 13 channels ) 5.180~5.240 GHz ( 4 channels ) Canada(CA): 2.412~2.462 GHz ( 11 channels ) 5.180~5.825 GHz ( 21 channels )	
Transmission Rate	802.11b: 1/2/5.5/11 Mbps 802.11a/g: 6/9/12/18/24/36/48/54 Mbps 802.11n(40MHz): UP to 300 Mbps	
Transmit Power	802.11a: 13dBm ±1.5dBm 802.11b: 16dBm ±1.5dBm 802.11g: 14dBm ±1.5dBm 802.11n(2.4G@20MHz): 13dBm ±1.5dBm 802.11n(2.4G@40MHz): 12dBm ±1.5dBm 802.11n(5G@20MHz): 12dBm ±1.5dBm 802.11n(5G@40MHz): 12dBm ±1.5dBm	
Receiver Sensitivity	802.11a: -68dBm ±2dBm@54Mbps 802.11b: -82dBm ±2dBm@11Mbps 802.11g: -68dBm ±2dBm@54Mbps 802.11n(2.4G@20MHz,MCS15): -64dBm ±2dBm 802.11n(2.4G@40MHz,MCS15): -60dBm ±2dBm 802.11n(5G@20MHz,MCS15): -64dBm ±2dBm 802.11n(5G@40MHz,MCS15): -60dBm ±2dBm	
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	
<b>Modem Support</b>		
List	USB modems and ISDN adapters which support the Communication Device Class Abstract Control Model interface List of tested device : 1. Hummingbird huc56s (Conexant) 2. Huawei E220/E230	

	<p>3. Simense HSDPA-180C                  4. Prolific 2303 + serial modem                  5. Quanta MUQ101                  6. Sony Ericsson MD400/MD400g                  7. Sierra C885</p>	
<b>LED indicators</b>		
Power indicator	<p>PWR 1(2)(PoE) / Ready:                  Red On: Power is on and booting up.                  Green On: Power is on and functioning Normally.</p>	
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.	
WLAN LEDs:	<p>WLAN Link /ACT: Green: Link, Orange: Poor signal                  Green for WLAN Strength: 1&lt;25%, 2&lt;50%, 3&lt;75%, 4&lt;100%</p>	
Fault	Red: Ethernet link down or power down	
<b>Fault contact</b>		
Relay	Relay output to carry capacity of 1A at 24VDC	
<b>Power</b>		
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	
<b>Physical Characteristic</b>		
Enclosure	IP-30	
Dimension (W x D x H)	52(W)x106.1(D)x144.3(H) mm (2.05x4.18x5.68 inch.)	
Weight (g)	803 g	807 g
<b>Environmental</b>		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-10 to 60°C (14 to 140°F)	
Operating Humidity	5% to 95% Non-condensing	
<b>Regulatory approvals</b>		
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	EN60950-1	
<b>Warranty</b>	3 years	

## Ordering Information

IAR-ABOC

Code Definition	Wireless Mode	10/100Base-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
IAR-620_US	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), US band
IAR-620_EU	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), EU band
IAR-620_JP	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), JP band
IAR-620_CA	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), CA band
IAR-620+_US	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., US band
IAR-620+_EU	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., EU band
IAR-620+_JP	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., JP band
IAR-620+_CA	Industrial IEEE 802.11 a/b/g/n Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., CA band

## Packing List

- IAR-620/620+ x 1
- Antenna x 2
- CD x 1
- Din-Rail Kit x 1
- Quick Installation Guide x 1
- Wall-Mount Kit x 1

## Optional Accessories

- DR-45 series : 45 Watts power supply
- DR-120 series : 120 Watts power supply
- RF Antenna Base (Magnetic) series
- DR-75 series : 75 Watts power supply
- WLAN RF Antenna (Omni-directional) series
- RF Cable series