

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





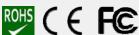












Introduction

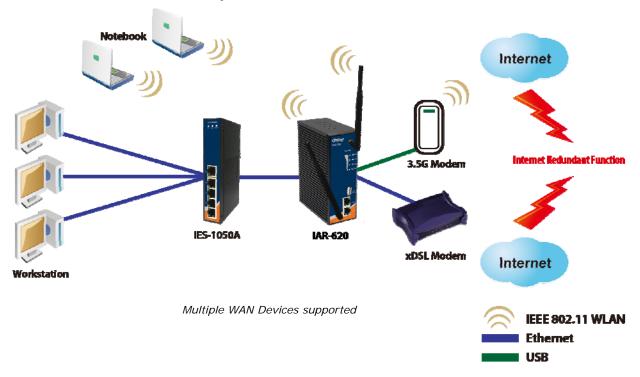
IAR-620 / IAR-620+ is a reliable IEEE 802.11 a/b/g/n WLAN VPN router with 2 ports 10/100Base-T(X) router where ETH1 for LAN and ETH2 for WAN. It supports 802.1X and MAC filter for security control. It could be configured to operate in 3 modes of routing function: Dynamic/Static IP route, PPPoE authentication, 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.



Dimension

Dimension (Unit =mm)

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Specifications

ORing AP Router Model	IAR-620	IAR-620+	
Physical Ports			
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: 108 ohms min	
USB Host port	1x USB 2.0 Host port		
WLAN interface			
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): -64dBm ±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		
Modem Support 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		

	3. Simense HSDPA-180C		
	4. Prolific 2303 + serial modem		
	 Quanta MUQ101 Sony Ericsson MD400/MD400g 		
	7. Sierra C885		
LED indicators			
	PWR 1(2)(PoE) / Ready:		
Power indicator	Red On: Power is on and booting up.		
10/100TV DIAE port indicator	Green On: Power is on and functioning Normally.		
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps. WLAN Link /ACT: Green: Link, Orange: Poor signal		
WLAN LEDs:	Green for WLAN Strength: 1<25%, 2<50%, 3<75%	5, 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	Duai DC IIIputs. 12-46VDC on 6-pin terminal block		
Modem not included)	6 Watts		
Overload current protection	Present		
Reverse polarity protection	Present		
Physical Characteristic			
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	
Environmental			
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		
Regulatory approvals			
EMI	FCC Part 15, CISPR (EN55022) class A		
FMC	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS)		
EMS	EN61000-4-8, EN61000-4-11		
Shock	IEC60068-2-27		
Free Fall	IEC60068-2-32		
Vibration	IEC60068-2-6		
Safety	EN60950-1		
Warranty	3 years		

Ordering Information



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
Available Model	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