



IAR-320 / IAR-320+

Industrial IEEE 802.11 a/b/g Cellular VPN Router

Features

- 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)/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-320+
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- Rigid IP-30 housing design
- DIN-Rail and Wall-mount enabled



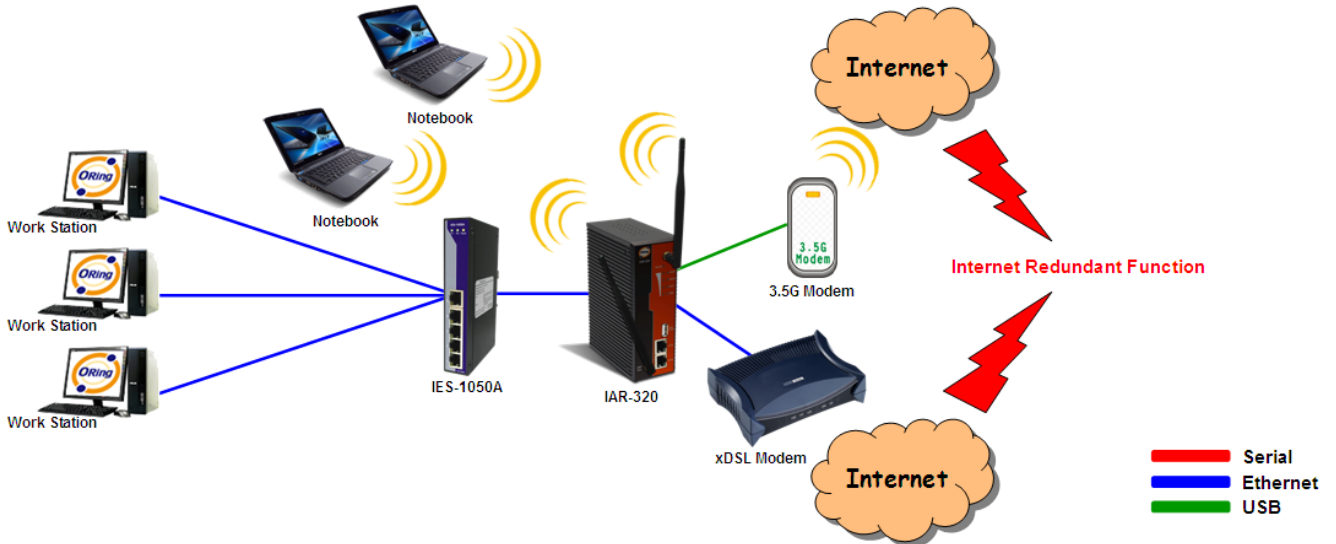
Introduction

IAR-320 / IAR-320+ is a reliable IEEE 802.11 a/b/g 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-320+ 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-320 / IAR-320+ is one of the best solution for applications of wireless communication.

Application

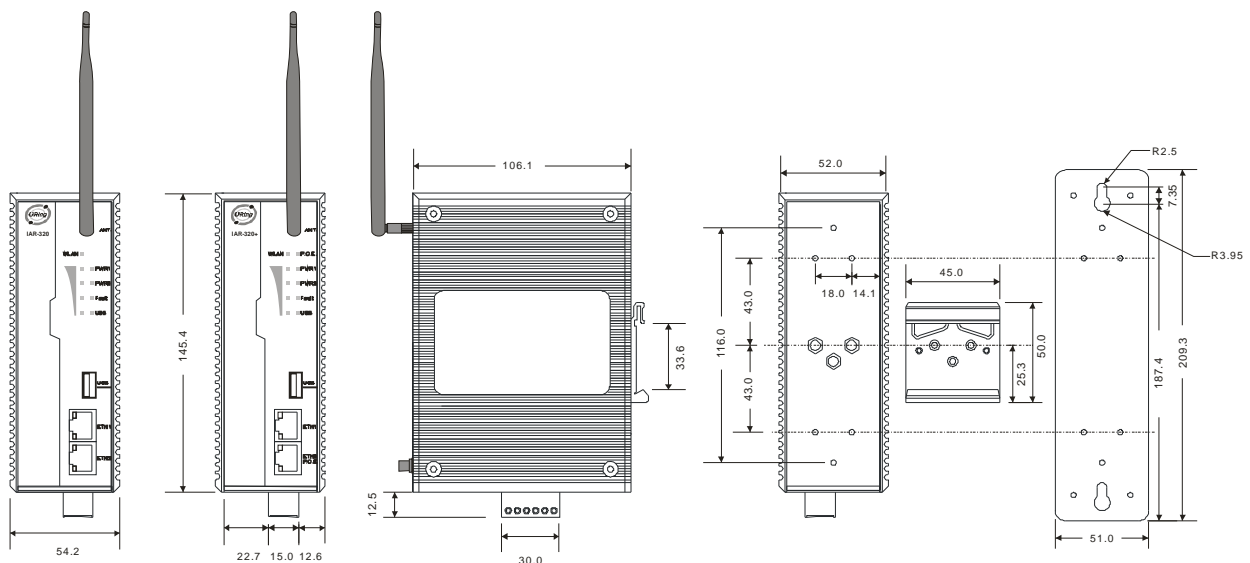
In IAR-320 / IAR-320+, there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up. IAR-320 / IAR-320+ also support NAT, VPN and Back up functions. You can build up the wireless network and connect to the Internet easily.



Multiple WAN Devices supported

Dimension

Unit = mm



Specifications

ORing AP Router Model	IAR-320	IAR-320+
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 : 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/3G/3.5G Modem) dial up	
Antenna Connector	Reverse SMA	
Radio Frequency Type	DSSS	
Modulation	IEEE802.11a: OFDM with BPSK, QPSK, 16QAM, 64QAM 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: 20dBm max	
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	
Modem Support		
List	<ol style="list-style-type: none"> 1. USB modems and ISDN adapters which support the Communication Device Class Abstract Control Model interface, such as Hummingbird huc56s (Conexant) 2. Huawei E220/E230 3. Simense HSDPA-180C 4. Prolific 2303 + serial modem 5. Quanta MUQ101 6. Sony Ericsson MD400/MD400g 7. Sierra C885 	
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.	
10/100TX 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 Green for 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	
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 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-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/b/g/n	- "2": 2 ports	- "+" : PoE P.D. present at ETH2
Available Model	Model Name	Description	
	IAR-320_US	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), US band	
	IAR-320_EU	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), EU band	
	IAR-320_JP	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), JP band	
	IAR-320+_US	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., US band	

	IAR-320+_EU	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., EU band
	IAR-320+_JP	Industrial IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), 1-port PoE P.D., JP band

Packing List

- IAR-320/320+ 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