# 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

ROHS | FC | CE | USB Modem | a/b/g Wifi 802.11a/b/g | P.S.E PoE | Redundant PWR | -20~70℃ Temperature

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## PRODUCT *OVERVIEW*

 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.
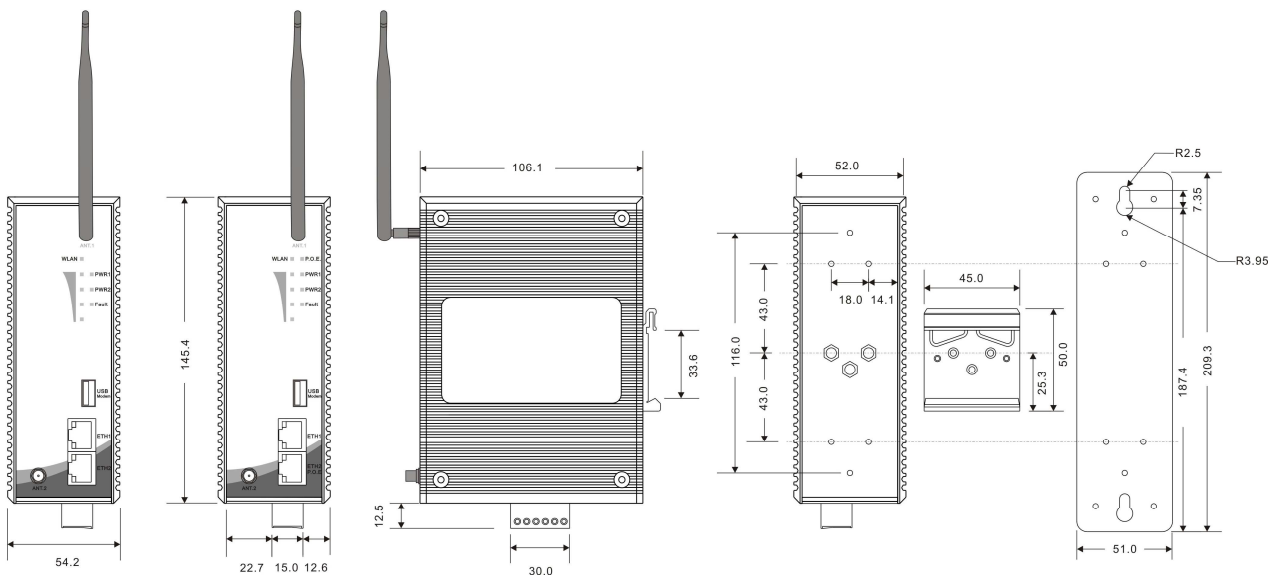
# Application

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*
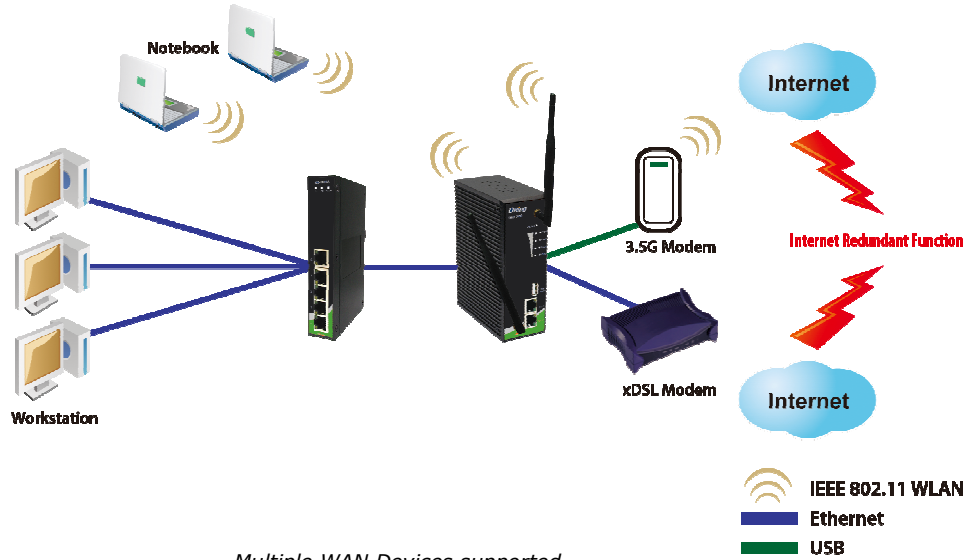
# Dimension

## Dimension (Unit =mm)

## Specifications

| 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 <br> Fully compliant with IEEE 802.3af Power Device specification <br> Over load & short circuit protection <br> Isolation Voltage: 1000 VDC min. <br> 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 | 2 x External reverse SMA-type antenna connector | |
| Radio Frequency Type | DSSS, OFDM | |
| Modulation | IEEE802.11a/n: OFDM with BPSK, QPSK, 16QAM, 64QAM <br> IEEE802.11b: CCK, DQPSK, DBPSK <br> IEEE802.11g/n: OFDM with BPSK, QPSK, 16QAM, 64QAM | |
| Frequency Band | America / FCC: <br> 2.412~2.462 GHz (11 channels ) <br> 5.180~5.240 GHz & 5.745~5.825 GHz ( 9 channels ) <br> Europe CE / ETSI: <br> 2.412~2.472 GHz ( 13 channels ) <br> 5.180~5.240 GHz ( 4 channels ) <br> Japan(JP): <br> 2.412~2.484 GHz ( 13 channels ) <br> 5.180~5.240 GHz ( 4 channels ) <br> Canada(CA): <br> 2.412~2.462 GHz ( 11 channels ) <br> 5.180~5.825 GHz ( 21 channels ) | |
| Transmission Rate | 802.11b: 1/2/5.5/11 Mbps <br> 802.11a/g: 6/9/12/18/24/36/48/54 Mbps <br> 802.11n(40MHz): UP to 300 Mbps | |
| Transmit Power | 802.11a: 13dBm ±1.5dBm <br> 802.11b: 16dBm ±1.5dBm <br> 802.11g: 14dBm ±1.5dBm <br> 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 |
| **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 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 | Present |

| protection | |
|---|---|
| **Physical Characteristic** | |
| Enclosure | IP-30 |
| Dimension (W x D x H) | 52(W)x106.1(D)x145.5(H) mm (2.05x4.18x5.72 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 |
| 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 |
| **Warranty** | 3 years |

## Ordering Information

**IAR-A B 0 C**

| Code Definition | Wireless Mode | 10/100Base-T(X) Port Number | PoE Identification |
|---|---|---|---|
| Option | **- 1:** 802.11 b/g<br>**- 2:** 802.11 a<br>**- 3:** 802.11 a/b/g<br>**- 4:** 802.11 b/g/n<br>**- 5:** 802.11 a/n<br>**- 6:** 802.11 a/b/g/n | **-"2":** 2 ports | **-"+":** PoE P.D. present at ETH2 |

| Available Model | Model Name | Description |
|---|---|---|
| | | |

## Packing List

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

## Optional Accessories

- **3ISYS-PWR-45 series : 45 Watts power supply**
- **3ISYS-PWR-120 series : 120 Watts power supply**
- **3ISYS-PWR-75 series : 75 Watts power supply**
- **WLAN RF Antenna (Omni-directional)**

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All specifications are subject to change without further
notice. All features with * mark will be available by
firmware upgrade.