IAR-142(+)-3G

IEEE 802.11 b/g/n 3G Cellular Router with 2x10/100Base-T(X)

Features

- High Speed Air Connectivity: WLAN interface support up to 150Mbps link speed
- Provide 2 port 10/100Base-T(X) port and 1 sim card slot
- 3.5G HSDPA Modem dial up included
- 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
- Various kind of WAN Connection Type supported: Dynamic/Static IP, PPPoE, Modem/Dial Up
- IP table to prevent access from unauthorized IP address
- Support NAT Setting (Virtual Server , Port Trigger , DMZ , UPnP)
- Versatile modes & event alarm by e-mail
- 1KV isolation for PoE P.D. port of IAR-142+-3G
- Event Warning by Syslog, Email, SNMP Trap
- Rigid IP-30 housing design
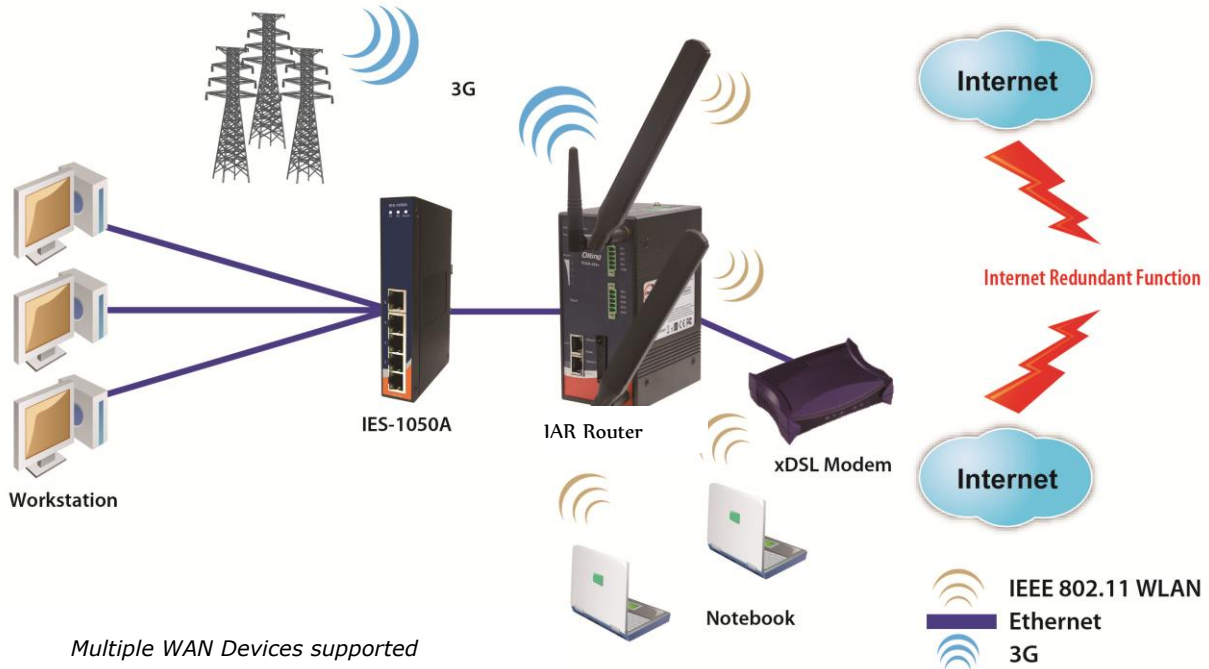- DIN-Rail and Wall-mount enabled

Introduction

IAR-142(+)-3G is a reliable IEEE 802.11 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 dial up.   In the mode of Modem dial up, it support GPRS/3G/3.5G modem by internal 3G module.   Users can set up WLAN environment to fulfill demands of various applications rapidly by dialing up cellular modems.   In addition, IAR-142+-3G also provides P.D. feature on ETH1 which is fully compliant with IEEE802.3af PoE P.D. specification.   This feature extends the layout up to 100 meters. Therefore, IAR-142(+)-3G is one of the best solution for applications of wireless communication.
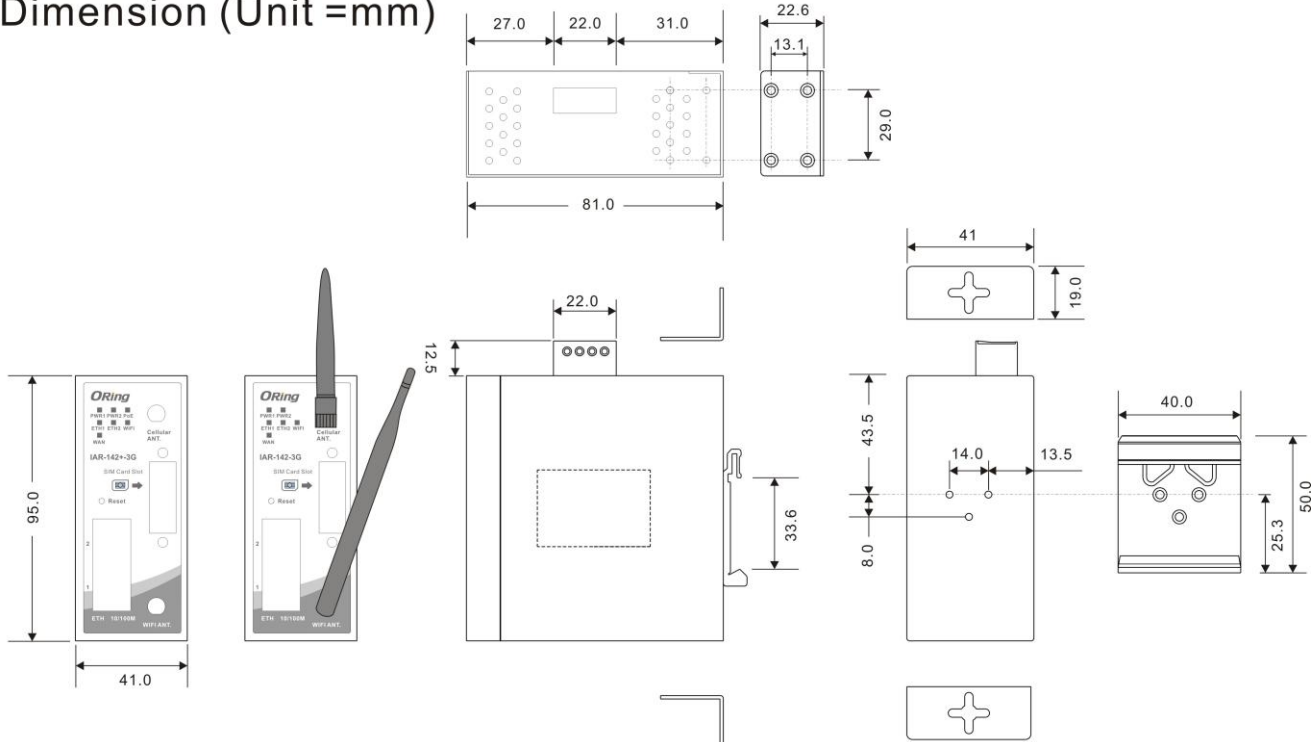
Application

In IAR-142(+)-3G , there are 3 modes of routing functions supported: Dynamic/Static IP route, PPPoE dial up, and Modem dial up.   IAR-142(+)-3G 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-142-3G	IAR-142+-3G
Physical Ports		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2	
PoE P.D. port		Present at ETH1 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
Sim Card Slot	1	
Cellular Interface		
Antenna Connector	1 x Reverse SMA Female	
Cellular Standard	GSM / GPRS/ EGPRS/ EDGE / WCDMA / HSDPA / HSUPA	
Band Option	Dual-band : HSUPA 1900/2100 MHz Quad-band : GSM/GPRS/EDGE 850/900/1800/1900 MHz WCDMA/HSDPA 850/900/1900/2100 MHz	
WLAN interface		
Antenna Connector	1 x Reverse SMA Female	
Modulation	IEEE802.11b: CCK/DQPSK/DBPSK IEEE802.11g: OFDM IEEE802.11n: BPSK, QPSK, 16-QAM, 64-QAM	
Frequency Band	America / FCC: 2.412~2.462 GHz (11 channels) Europe CE / ETSI: 2.412~2.472 GHz (13 channels)	
Transmission Rate	802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n(40MHz): UP to 150 Mbps	
Transmit Power	802.11b: 13.5dBm ±1.5dBm 802.11g: 13.5dBm ±1.5dBm 802.11n(2.4G@20MHz): 13.5dBm ±1.5dBm 802.11n(2.4G@40MHz): 13.5dBm ±1.5dBm	
Receiver Sensitivity	802.11b: -90dBm ±2dBm@1Mbps 802.11g: -72dBm ±2dBm@54Mbps 802.11n(2.4G@40MHz,MCS7): -68dBm ±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	
LED indicators		
Power indicator	3 x LEDs, PWR1(2)(PoE) / Ready: Green On: Power is on and functioning Normally.	
10/100T RJ45 port indicator	2 x LEDs, Green for port Link/Act at 100Mbps.	
WLAN LEDs	1 x LED, Green blinking: WLAN Link /ACT	
WAN LEDs	1 x LED, Green blinking : Power is on and functioning Normal	
Power		
Redundant Input power	Dual DC inputs. 12-48VDC on 4-pin terminal block	
Power consumption	5watts	
Overload current protection	Present	
Reverse polarity protection	Present	

Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	41(W)x81(D)x95(H) mm	
Weight (g)	400g	410g
Environmental		
Storage Temperature	-40 to 85oC (-40 to 185ºF)	
Operating Temperature	-10 to 60ºC (14 to 140ºF)	
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	IEC60068-2-31	
Vibration	IEC60068-2-6	
Safety	EN60950-1	
Warranty	3 years	

Ordering Information

IAR-14A B CC

Code Definition	Giga Ethernet Port Number	PoE Identification	Cellular Generation
Option	**2:** 2 ports	**+ :** PoE P.D. present at ETH1	**3G :**UMTS

	Model Name	Description
	IAR-142-3G_US	IEEE 802.11 b/g/n 3G Cellular Router with 2x10/100Base-T(X), US Band
Available	**IAR-142-3G_EU**	IEEE 802.11 b/g/n 3G Cellular Router with 2x10/100Base-T(X), EU Band
Model	**IAR-142+-3G_US**	IEEE 802.11 b/g/n 3G Cellular Router with 2x10/100Base-T(X), US Band, 1-port PoE P.D., US band
	IAR-142+-3G_EU	IEEE 802.11 b/g/n 3G Cellular Router with 2x10/100Base-T(X), EU Band, 1-port PoE P.D., EU band

Packing List

- **IAR-142(+)-3G**
- **2.4GHz Antenna x 1**
- **3G Antenna x 1**

- **CD x 1**
- **Din-Rail Kit x 1**
- **4-Pin Terminal Block x 1**

- **Quick Installation Guide x 1**
- **Wall-Mount Kit x 2**
- **Dust Cover x 2**

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**