

# InRouter6X5 Series

## Multi-Access Wi-Fi, RS-485/232 to Ethernet



**Multi-Access:** Four Ethernet switch ports,  
One RS232/485 (DB9),  
Wi-Fi (2.4GHz 802.11b/g/n),  
3G/UMTS or backup WAN link.

**Power supply:** 9~ 26VDC Power Terminal

**High security:** Advanced VPN(IPSec/SSL/GRE/L2TP/PPTP)

**Remote Centralized management:** InHand Cloud Platform

**Reliable:** Dual Internet links with auto-failover



### Overview

As an HSPA+ dual-link communication device, the InRouter6X5 series provide a compact industrial platform for next-generation industrial networks. The IR6x5 cellular routers can quickly access high-speed Internet and support secure and reliable data transmissions. Integrating the functions of an unmanaged switch, serial server, 3G Router, IP modem, Advanced VPN client and even Wi-Fi, it creates new opportunities for applications in industrial automation and control, fleet monitoring, video surveillance, advertising media, and outlet networking. Admins may even configure the InRouter 6x5 with a smart phone or tablet's browser.

### Specification

#### Interfaces

##### WAN Interfaces

Ethernet WAN: Static IP, PPPoE, DHCP Client  
Cellular WAN: HSPA+: 21Mbps(Down) or 5.76Mbps(Up)  
GSM/GPRS/EDGE: 850/900/1800/1900 MHz  
UMTS /HSPA/HSPA+: 850/900/1900/2100 MHz

##### LAN Interfaces

Auto Adaption: Four 10M/100M Ethernet ports, auto-adaptive  
MDI/MDI-X auto crossover  
Isolation Protection: 1.5KV isolation protection

##### Power supply

9~26VDC, 5.08mm 2-pin terminal power supply

##### Wi-Fi (Optional)

Wireless: 150Mbps 802.11b/g/n, either AP or client mode  
Authentication: open, WEP, WPA (Personal), WPA-2 (Enterprise)

##### Serial ports

Number: 1 RS232/RS485 DB9  
Protocol: Modbus RTU, Transparent TCP, Virtual COM

#### Environment

**Operating temperature:** -20~70 °C, -10 ~ 158 °F

**Storage temperature:** -40 ~85 °C, -40 ~185 °F

**Humidity:** 5%~95%, non-condensing

**Protection grade:** IP40

#### EMC

ESD: EN61000-4-2 Surge: EN61000-4-5

EFT: EN61000-4-4 RF: EN61000-4-3

RC: EN61000-4-6 OVI: EN61000-4-12

VMFI: EN61000-4-8

#### Safety

Anti-shock: IEC60068-2-27

Anti-drop: IEC60068-2-32

Anti-vibration: IEC60068-2-6

#### Reliable Network Link

Built-in hardware watchdog, self-recovery

PPP link detection disaster self-recovery

Professional upgrades mechanism, assure upgrade safety

### Firewall security service

Stateless packet inspection, anti-DoS attacks, multicast filtering ping filtering, access control list

### Configuration

DB9 console port, telnet, and web configuration

### Upgrade

Remote upgrade and web upgrade, utilizing a patented redundant backup mechanism for worry-free upgrades

### Network Function

Network Address Translation (NAT) and Port Address Translation (PAT)

### TCP/IP Protocols

ICMP, IP, TCP, UDP, DHCP, PPP, ARP, Telnet, DNS, SSH, VRRP, HTTP, HTTPS, VPN(IPSec/SSL/PPTP/L2TP/GRE)

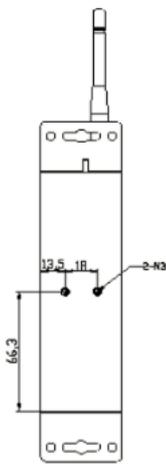
### Installation

Optional Wall mounting kits or DIN-rail mount

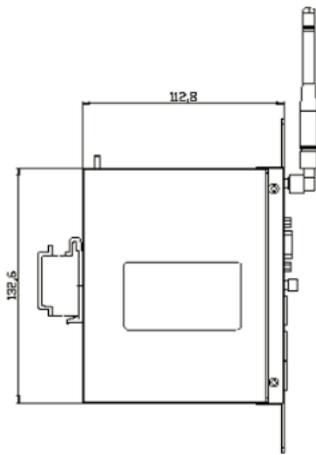
### Warranty

Warranty Period: One year, extendable

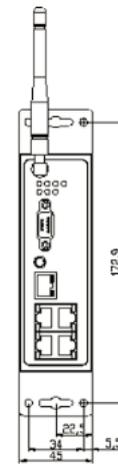
## Dimensions (mm)



Back View

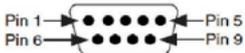


Side View



Front View

## DB9 RS232 /RS485 Port



Pin	232 DTE	232 DCE	422/485
1	DCD <sup>2</sup>	DCD	GND
2	RXD	TXD	CTS+ (HSI+)
3	TXD	RXD	RTS+ (HSD+)
4	DTR <sup>2</sup>	DSR	RXD+
5	GND	GND	RXD-
6	DSR <sup>2</sup>	DTR	CTS- (HSI-)
7	RTS	CTS	RTS- (HSD-)
8	CTS	RTS	TXD+
9	RI <sup>2</sup>	RI	TXD-

## Device Manager Cloud



**Order Information**

Model	IR6x5
Part Number	IR6<X>5-<N>-<W>-<P>-<S>
X (Option VPN)	0: standard router; 9: VPN, support IPSec/SSL/PPTP/L2TP/GRE
N (Network)	<b>UE00:</b> No wireless module <b>PH09:</b> Quad band HSPA+/HSPA/UMTS: 850/900/1900/2100MHz Quad band GSM: 850/900/1800/1900MHz <b>VZ16:</b> CDMA2000 EVDO\1X(800MHz/1900MHz/2100MHz) <b>VZ01:</b> EVDO(800MHz/1900MHz. for China/India only)
W (Wi-Fi)	<NA>: No Wi-Fi function <b>AP:</b> Wi-Fi AP mode <b>STA:</b> Wi-Fi client mode
S (Serial port)	<NA> :RS232 485 :RS485
Example	IR695 PH09-AP : HSPA+, Support VPN(IPSec/PPTP/L2TP/GRE) ,Wi-Fi AP,RS232 serial port

Notice: IR695PH09-AP/STA does not support OpenVPN.

### InHand Networks

InHand Networks provides reliable, secured and intelligent M2M solution for electric power, industrial automation, commercial and medical devices. Recognized by world class customers and partners. Proven by a large install base. Expanding with intensive investments in research and development. Enduring for long-term support.

InHand Networks has become leader in industrial grade network technology by providing industrial cellular routers, industrial Ethernet switches, wireless sensor network devices and cloud based M2M platforms.

Connecting devices, enabling services.



## InHand Networks

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