

# InRouter611 Series

## Smart DB9/Ethernet to 4G Cellular VPN Router



- **Compact Design:** LTE(4G) / HSPA+/UMTS (3G) cellular interface, RS232/485 (DB9), Wi-Fi (2.4GHz 802.11b/g/n)
- **Low Power Consumption:** Below 3 Watts
- **High Reliability:** Link self-recovery
- **High security:** Advanced VPN (IPSec/SSL/GRE/L2TP/PPTP)
- **Centralized management platform:** InHand Device Manager Cloud
- **Ruggedized:** -20 ~ 70°C

## Overview

InRouter6x1 series are compact high-speed cellular gateways, transmitting serial/Ethernet data to a control center through the LTE/HSPA+/UMTS(3G) mobile network. With an optional Wi-Fi interface, auto-recovery and auto-reboot, the InRouter6x1 series ensures reliable data transmission. The InRouter6x1 series also secures communications with multiple VPN technologies, including standard IPSec/SSL/PPTP/L2TP and GRE. Additionally, the router allows for remote management via the command line and web interface, significantly reducing maintenance costs and cutting the technician's travel time.

By combining security, remote access and the 4G cellular network the IR6x1 exceeds as a scalable platform for large networks of unattended field applications, for example: outlets, vending machines, ATM/POS machines and small shops.

## Specification

### Interfaces

Ethernet Port: One RJ-45, 10/100Mbps, auto-sensing  
Magnetic Isolation Protection: 1.5KV built-in

#### Cellular WAN Port:

LTE: 700/900/1800/2100/2600MHz, 150Mbps(DL), 50Mbps (UL)  
Universal HSPA+: 21Mbps(DL)/5.76Mbps(UL)  
GSM/GPRS/EDGE: 850/900/1800/1900 MHz  
UMTS/HSPA/HSPA+: 850/900/1900/2100 MHz

#### Wi-Fi (Optional)

Wireless: 150Mbps 802.11b/g/n  
Work mode: AP/Client  
Authentication: Open, WEP, WPA(Personal),  
WPA-2(Enterprise)

#### Serial Port:

Number of Ports: 1 RS-232/RS-485 (DB9)  
Isolation Protection: 1.5KV ESD protection  
Serial BUS Protocols:  
Modbus TCP, Transparent TCP, Virtual COM

### Environmental

Housing: Metal, IP30 Protection  
Temperature: Operating: -20~70°C(14~158°F)  
Storage: -40~85°C(-40~185°F)  
Humidity: 5% ~ 95%, non-condensing

### Safety Certificate

Anti-shock: IEC60068-2-27  
Anti-drop: IEC60068-2-23  
Anti-vibration: IEC60068-2-6

### Configuration Method: Web/Telnet

### Power Requirements

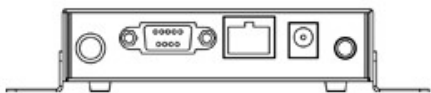
Power Input: 9 ~ 26 VDC with Industrial Terminal  
Power Consumption:  
Max: 240mA@12VDC (2.88W)  
Idle: 150mA@12VDC (1.8W)  
Operating: 170mA~220mA@12V DC (2.04W~2.64W)

### Warranty

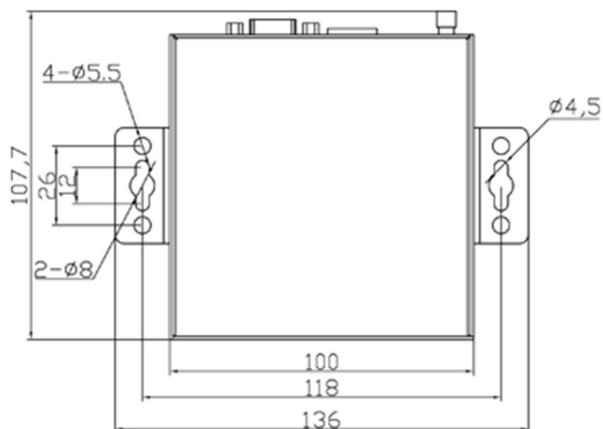
Warranty Period: 3 year

## Dimensions (mm)

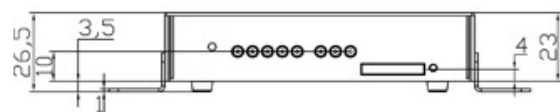
Standard Model (L×W×H=100×100×23mm)



Back View



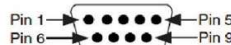
Top View



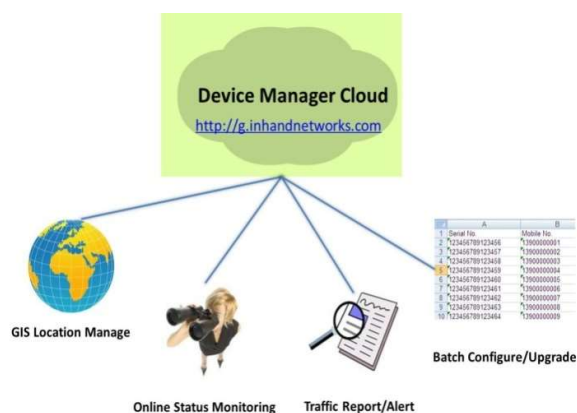
Front View

## DB9 RS232/RS485

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



## Device Manager Cloud



GIS Service– Locate stolen devices  
Online Status Monitoring – Remote diagnosis  
Traffic Report/Alert – Manage cellular plans  
Batch Operations – Manage large networks

## Ordering Information

Model	IR6x1
Part Number	IR611-<N>-<W>-<S>
N (Network)	<b>4G:</b> LTE and following 3G bands <b>3G:</b> Quad band HSPA+/HSPA/UMTS: 850/900/1900/2100MHz Quad band GSM: 850/900/1800/1900MHz For <b>Australian Cellular Networks</b> , both LTE <b>CAT1</b> and <b>CAT4</b> models are available
W (WIFI)	<b>&lt;NA&gt;</b> : No Wi-Fi function <b>AP:</b> Wi-Fi AP model <b>STA:</b> Wi-Fi client model
S (Serial Port)	<b>&lt;NA&gt;</b> : RS232 <b>485</b> : RS485