

## IG502 Series

# Cost-effective Edge Gateway

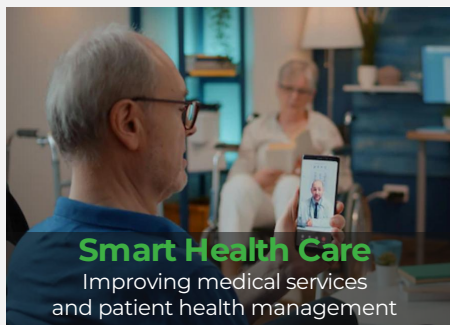
• Multiple means of Internet access

• Rich interfaces

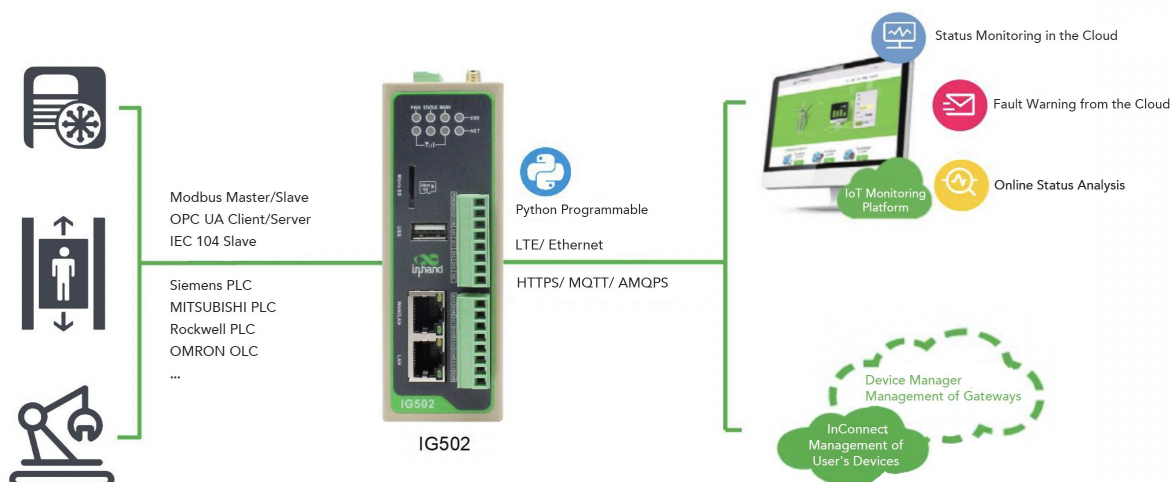
• Built-in DSA

• Cloud management

InGateway502 (referred to as IG502) is a cost-effective edge gateway launched by Inhand for the industrial Internet of Things. The IG502 is small in size and rich in interfaces for convenient global cellular access. Support users to use Python secondary development, built-in DeviceSupervisor™ Agent service, support hundreds of communication protocols, easy to achieve device data acquisition, processing and cloud, while supporting DeviceLive cloud management, to help enterprises speed up the digital process.



## Solution



## Feature and Advantage

### Performance and Platform

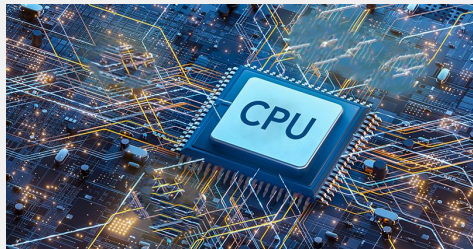
- High-performance ARM Cortex-A8 processor, 600MHz
- High capacity DDR3 RAM up to 512MB and 8GB eMMC Flash
- Gives the cellular gateway powerful edge computing capability, providing computing resources for data optimization, real-time response, agile connection, and intelligent analysis on edge nodes

### Rich interfaces

- 2x 10/100Mbps ethernet interface
- 1x RS-232/RS-485+1x RS-485
- 1x USB2.0
- 1x MicroSD
- 4x DI+4x DO, optional
- GPS, WIFI and Bluetooth optional

### Stable communication

- 4G/Wi-Fi/FE, etc
- Wired, cellular, Wi-Fi mutual backup, dual SIM failover
- Independent hardware and software watchdog
- Multilevel link detection, communication self-healing



### Industrial-grade, ready for harsh industrial environments

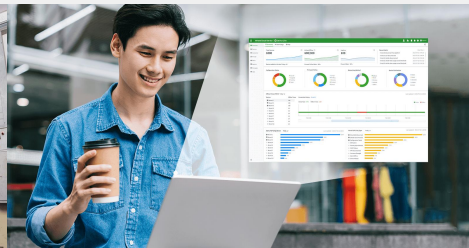
- Operating temperatures up to -20 °C ~ 70 °C, supports +12 ~ 48VDC wide voltage power inputs, protection rating IP30, providing stable and secure network communications for demanding unattended industrial sites

### DeviceSupervisor™ Agent Service

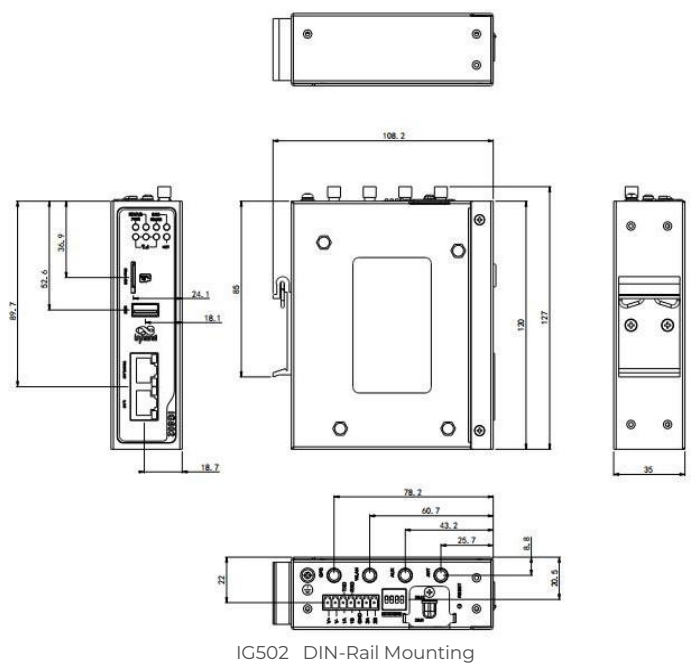
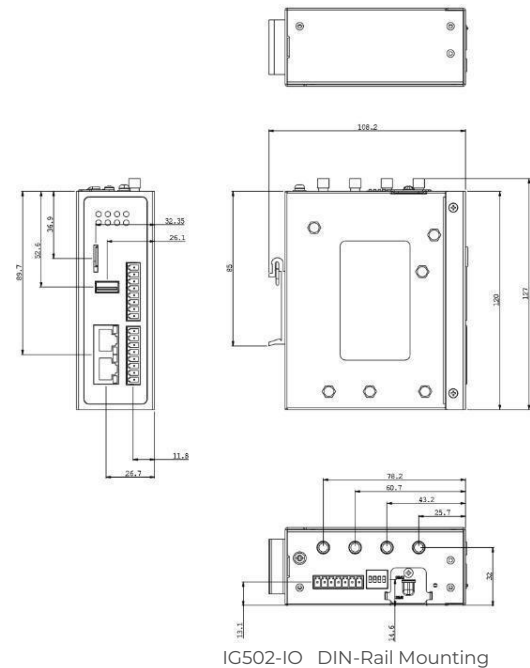
- "Zero code/Low code" easy to achieve data acquisition on the cloud
- Integrate 80+ mainstream data acquisition protocols
- Support data preprocessing
- Integrated data publishing services, public cloud, private cloud, local SCADA and other seamless access

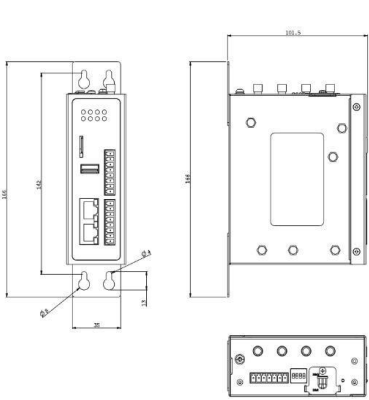
### InHand DeviceLive Cloud Manager

- Supports device remote access
- Supports remote batch management of devices
- Supports DSA remote management
- Supports remote user terminal management

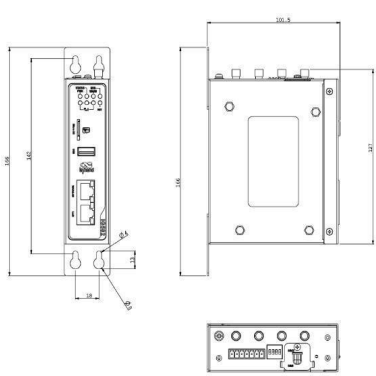


## Dimensions (mm)

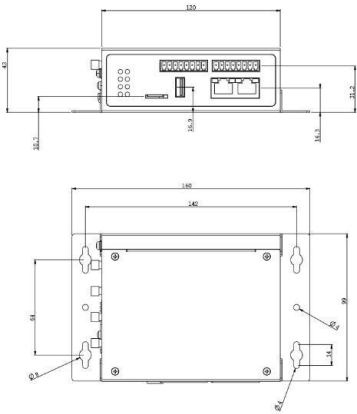




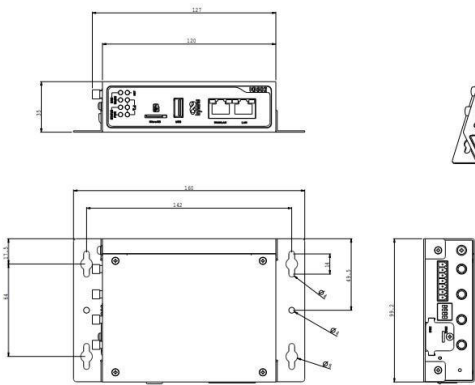
IG502-IO Wall hanging mounting A\*



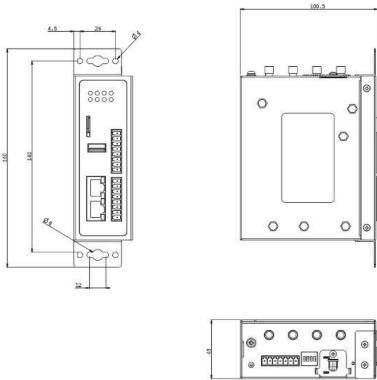
IG502 Wall hanging mounting A\*



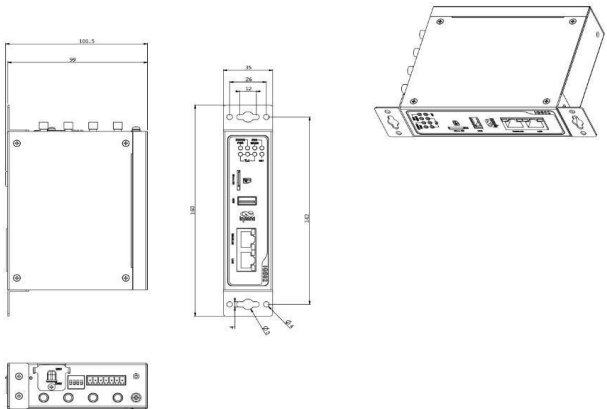
IG502-IO Wall hanging mounting B\*



IG502 Wall hanging mounting B\*



IG502-IO Wall hanging mounting C\*



IG502 Wall hanging mounting C\*

\* Wall hanging mounting A's Accessory number:AFIX990001  
\* Wall hanging mounting B's Accessory number: AFIX000090  
\* Wall hanging mounting C's Accessory number: AFIX000091



Product Specifications

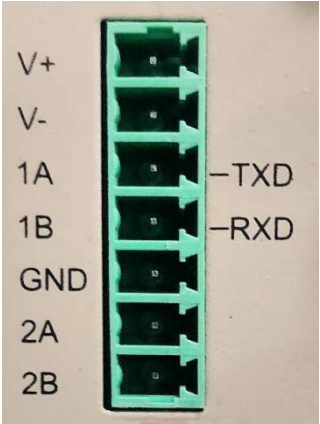
| Hardware Specifications                                                                                                              |                                                                                                      |                      |                         |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------|-------------------------|
| Item                                                                                                                                 | IC502                                                                                                |                      |                         |
| Hardware Platform                                                                                                                    |                                                                                                      |                      |                         |
| CPU                                                                                                                                  | ARM Cortex-A8@600MHz                                                                                 |                      |                         |
| RAM                                                                                                                                  | 512MB                                                                                                |                      |                         |
| FLASH                                                                                                                                | 8GB eMMC                                                                                             |                      |                         |
| Interfaces                                                                                                                           |                                                                                                      |                      |                         |
| Ethernet Port                                                                                                                        | 2 x 10/100Mbps Ethernet port                                                                         |                      |                         |
| Serial Port                                                                                                                          | RS485 x 1+RS232 x 1/RS485 x 1 , industrial terminal block, ordering guide for details                |                      |                         |
| USB                                                                                                                                  | 1 x TypeA, USB 2.0                                                                                   |                      |                         |
| SIM Card                                                                                                                             | Micro SIM x 2                                                                                        |                      |                         |
| Antenna Connector                                                                                                                    | LTE: SMA x1, Wi-Fi: SMA x1, GNSS: SMA x1, Note: North America models: 2 x SMA 4G antenna connectors. |                      |                         |
| Wi-Fi(Optional)                                                                                                                      | STA, 802.11/b/g/n, 2.4G                                                                              |                      |                         |
| Bluetooth (Optional)                                                                                                                 | BLE 4.2                                                                                              |                      |                         |
| GNSS(Optional)                                                                                                                       | Satellite location GPS, SMA x1                                                                       |                      |                         |
| Button                                                                                                                               | Pinhole reset button x1                                                                              |                      |                         |
| TF card                                                                                                                              | MicroSD support, up to 32GB expansion                                                                |                      |                         |
| Interface extension                                                                                                                  | Up to 4 x DI+4 x DO                                                                                  |                      |                         |
| Others                                                                                                                               |                                                                                                      |                      |                         |
| RTC                                                                                                                                  | Support (button battery backup)                                                                      |                      |                         |
| Hardware watchdog                                                                                                                    | Support                                                                                              |                      |                         |
| Power                                                                                                                                |                                                                                                      |                      |                         |
| Power input                                                                                                                          | 12-48V DC                                                                                            |                      |                         |
| Power Interface                                                                                                                      | Industrial terminal block                                                                            |                      |                         |
| Power                                                                                                                                | 250mA@12V                                                                                            |                      |                         |
| Mechanical characteristics                                                                                                           |                                                                                                      |                      |                         |
| Installation                                                                                                                         | Panel,Rail                                                                                           | Weight               | 420g                    |
| Dimensions                                                                                                                           | 110x127x35mm                                                                                         | Protection Rating    | IP30                    |
| Housing                                                                                                                              | Metal                                                                                                | Cooling              | Fanless                 |
| Ambient Temperature And Humidity                                                                                                     |                                                                                                      |                      |                         |
| Storage Temperature                                                                                                                  | -40 ~ 85℃                                                                                            | Ambient humidity     | 5~ 95% (non-condensing) |
| Operation temperature                                                                                                                | -20~ 70℃                                                                                             |                      |                         |
| Indicator                                                                                                                            |                                                                                                      |                      |                         |
| LED                                                                                                                                  | PWR, STATUS, WARN, ERR, Signal Strength (3), LTE                                                     |                      |                         |
| EMC                                                                                                                                  |                                                                                                      |                      |                         |
| Static                                                                                                                               | EN61000-4-2, level 3                                                                                 |                      |                         |
| Radiation Electric Field                                                                                                             | EN61000-4-3, level 3                                                                                 |                      |                         |
| Pulsed Electric Field                                                                                                                | EN61000-4-4, level 3                                                                                 |                      |                         |
| Surge                                                                                                                                | EN61000-4-5, level 3                                                                                 |                      |                         |
| Conducted Disturbance Immunity                                                                                                       | EN61000-4-6 ,level 3                                                                                 |                      |                         |
| Shock Wave Resistance                                                                                                                | EN61000-4-12,level 3                                                                                 |                      |                         |
| Power Frequency Magnetic Field Resistance                                                                                            | EN61000-4-8, horizontal / vertical 400A/m (>level 2)                                                 |                      |                         |
| Physical Specs                                                                                                                       |                                                                                                      |                      |                         |
| Shockproof                                                                                                                           | IEC60068-2-27                                                                                        | Vibration Resistance | IEC60068-2-6            |
| Free Fall                                                                                                                            | IEC60068-2-32                                                                                        |                      |                         |
| Certification                                                                                                                        |                                                                                                      |                      |                         |
| CE, UKCA, FCC, PTCRB, UL, CID2 (Class1 Division 2), MIC&JATE, VerizonWireless, AT&T, IC, RCM, NBTC, ANATEL, IEC62443-4-2, IEC61850-3 |                                                                                                      |                      |                         |

| Software Specifications         |                                                                                                                                                                              |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Item                            | IG502                                                                                                                                                                        |
| Operating System                |                                                                                                                                                                              |
| OS                              | Custom Linux                                                                                                                                                                 |
| Internet                        |                                                                                                                                                                              |
| Access authentication           | APN , VPDN                                                                                                                                                                   |
| Internet access                 | CHAP/PAP                                                                                                                                                                     |
| Network format                  | 5G SA/NSA、LTE Cat1                                                                                                                                                           |
| LAN protocol                    | ARP、Ethernet                                                                                                                                                                 |
| WAN protocol                    | Static IP、DHCP                                                                                                                                                               |
| Network Protocol                |                                                                                                                                                                              |
| IP Application                  | ICMP、DNS、TCP/UDP、TCP/Server、DHCP                                                                                                                                             |
| IP Routing                      | Static routing                                                                                                                                                               |
| Security                        |                                                                                                                                                                              |
| Multilevel user                 | Multi-level management rights                                                                                                                                                |
|                                 | Firewall                                                                                                                                                                     |
| Data security                   | OpenVPN, IP/Sec VPN                                                                                                                                                          |
| Reliability                     |                                                                                                                                                                              |
| Link Detection                  | Sends heartbeat packets to detect, auto redials when disconnected                                                                                                            |
| Dual SIM Failover               | Supports dual SIM failover                                                                                                                                                   |
| Embedded Watchdog               | Device runs self-detection, auto recovers from malfunctions                                                                                                                  |
| Open Platform                   |                                                                                                                                                                              |
| Development Environment         | Python                                                                                                                                                                       |
| Cloud platform                  | AWS, Azure, Ali and other cloud platforms                                                                                                                                    |
| Data Acquisition Protocol(*DSA) |                                                                                                                                                                              |
| Industrial Protocol             | Modbus RTU Master/Slave, Modbus TCP Master/Slave, EtherNet/IP, ISO on TCP, OPC UA Client/Server, Mitsubishi MC 3C/3E/3C OverTCP, Mitsubishi CPU Port, FINSUDP, HostLink, PPI |
| Electricity Protocol            | DLT645-2007, IEC101/104, DNP3.0                                                                                                                                              |
| Other Protocol                  | BACnet, CNC                                                                                                                                                                  |
| Network Management              |                                                                                                                                                                              |
| Configuration                   | Web, Telnet, SSH                                                                                                                                                             |
| Upgrade                         | Web, DeviceLive                                                                                                                                                              |
| Log                             | Support local system logs, remote logs, and important log power-off preservation                                                                                             |
| Configuration backup            | Import and export configuration files                                                                                                                                        |
| Remote management               | DeviceLive or HTTP, HTTPS, SSH, etc.                                                                                                                                         |

\*DSA: The DeviceSupervisor Agent (DSA), developed by InHand Networks, is a cutting-edge intelligence software designed to operate on Edge Computer products. It enables clients to quickly implement data collection, processing, protocol conversion, and cloud connectivity through a "zero code/low code" approach. If you need the DSA application on the EdgeComputer product, please contact us to obtain the DSA software package.

## Interface Definition

| 7 PIN Definition |            |                                |
|------------------|------------|--------------------------------|
| PIN              | Definition | Description                    |
| 1                | V+         | Positive electrode             |
| 2                | V-         | Negative electrode             |
| 3                | TXD or 1A  | Serial RS232 send or RS485+    |
| 4                | RXD or 1B  | Serial RS232 receive or RS485- |
| 5                | GND        | Serial RS232 signal ground     |
| 6                | A or 2A    | Serial RS485+                  |
| 7                | B or 2B    | Serial RS485-                  |



| I/O Definition |            |                             |                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------|------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PIN            | Definition | Description                 |                                                                                                                                                                                                                                                                                                                                                                                           |
| 1              | PCOM       | Dry contact access point    | 4x Digital/pulse input DI,<br>2x Dry contact control port,<br>1x Common port, 1x Idle,<br>Dry contact status "1": closed<br>Dry contact status "0": disconnected<br>Wet contact status "1": +10~+30V/-30~-10VDC<br>Wet contact status "0": 0~+3V/-3~0V<br>Isolation 3000VDC<br>Pulse signal counter supported<br>Supports up to 100Hz pulse signal (32-bit counter + 1-bit overflow mark) |
| 2              | DGND       | Dry contact ground point    |                                                                                                                                                                                                                                                                                                                                                                                           |
| 3              | DICOM      | Digital input common port   |                                                                                                                                                                                                                                                                                                                                                                                           |
| 4              | DI0        | Digital/pulse input port 0  |                                                                                                                                                                                                                                                                                                                                                                                           |
| 5              | DI1        | Digital/pulse input port 1  | 3x Digital/pulse output DO,<br>1x Digital output,<br>4x Digital ground,<br>Isolation 3000VDC                                                                                                                                                                                                                                                                                              |
| 6              | DI2        | Digital/pulse input port 2  |                                                                                                                                                                                                                                                                                                                                                                                           |
| 7              | DI3        | Digital/pulse input port 3  |                                                                                                                                                                                                                                                                                                                                                                                           |
| 8              | NC         | None                        |                                                                                                                                                                                                                                                                                                                                                                                           |
| 9              | DO0        | Digital/pulse output port 0 |                                                                                                                                                                                                                                                                                                                                                                                           |
| 10             | DGND       | Digital ground              |                                                                                                                                                                                                                                                                                                                                                                                           |
| 11             | DO1        | Digital/pulse output port 1 |                                                                                                                                                                                                                                                                                                                                                                                           |
| 12             | DGND       | Digital ground              |                                                                                                                                                                                                                                                                                                                                                                                           |
| 13             | DO2        | Digital/pulse output port 2 |                                                                                                                                                                                                                                                                                                                                                                                           |
| 14             | DGND       | Digital ground              |                                                                                                                                                                                                                                                                                                                                                                                           |
| 15             | DO3        | Digital/pulse output port 3 |                                                                                                                                                                                                                                                                                                                                                                                           |
| 16             | DGND       | Digital ground              |                                                                                                                                                                                                                                                                                                                                                                                           |



I/O

Ordering Guide

| Model code:IG502-<WMNN>-<W/NA>-<G/NA> |                                                                                                                                     |               |                      |                |                  |            |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|----------------|------------------|------------|
| Model                                 | <WMNN>: Cellular Type & Frequency Band                                                                                              | Ethernet Port | Serial Port          | <IO/NA>: I/O   | <W/NA>: WLAN&BLE | <G/NA>:GPS |
| IG502-LQA3                            | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None       |
| IG502-LQA3-IO                         | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None       |
| IG502-LQA3-W-G                        | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES        |
| IG502-LQA3-IO-W-G                     | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES        |
| IG502-LQA3-D485                       | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS485 x2             | None           | None             | None       |
| IG502-LQA3-D485-IO                    | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | None             | None       |
| IG502-LQA3-D485-W-G                   | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS485 x2             | None           | YES              | YES        |
| IG502-LQA3-D485-IO-W-G                | China CAT1<br>LTE-FDD Band1/3/5/8<br>LTE-TDD Band34/38/39/40/41<br>GSM 900/1800MHz                                                  | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES        |
| IG502-NRQ1                            | China 5G NR<br>NSA n41/n78/n79<br>SA n1/n28/n41/n77/n78/n79<br>LTE-FDD B1/B3/B5/B8<br>LTE-TDD B34/B38/B39/B40/B41<br>WCDMA B1/B5/B8 | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None       |
| IG502-NRQ1-D485                       | China 5G NR<br>NSA n41/n78/n79<br>SA n1/n28/n41/n77/n78/n79<br>LTE-FDD B1/B3/B5/B8<br>LTE-TDD B34/B38/B39/B40/B41<br>WCDMA B1/B5/B8 | 2x 10/100Mbps | RS485 x2             | None           | None             | None       |
| IG502-FQ33                            | North America CAT1<br>LTE-FDD Band2/4/5/12/13/25/26<br>WCDMA Band2/4/5                                                              | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None       |
| IG502-FQ33-IO                         | North America CAT1<br>LTE-FDDBand2/4/5/12/13/25/26<br>WCDMA Band2/4/5                                                               | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None       |
| IG502-FQ33-W-G                        | North America CAT1<br>LTE-FDDBand2/4/5/12/13/25/26<br>WCDMA Band2/4/5                                                               | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES        |
| IG502-FQ33-IO-W-G                     | North America CAT1<br>LTE-FDD:Band2/4/5/12/13/25/26<br>WCDMA Band2/4/5                                                              | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES        |
| IG502-FQ33-D485-IO-W-G                | North America CAT1<br>LTE-FDD:Band2/4/5/12/13/25/26<br>WCDMA Band2/4/5                                                              | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES        |
| IG502-FF53                            | EMEA CAT1<br>LTE-FDD:Band1/3/7/8/20/28<br>GSM/GPRS/EDGE:Band3/8                                                                     | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None       |
| IG502-FF53-IO                         | EMEA CAT1<br>LTE-FDD Band1/3/7/8/20/28<br>GSM/GPRS/EDGE Band3/8                                                                     | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None       |

Ordering Guide

| Model code:IG502-<WMNN>-<W/NA>-<G/NA> |                                                                                                                                                   |               |                      |                |                  |             |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|----------------|------------------|-------------|
| Model                                 | <WMNN>: Cellular Type & Frequency Band                                                                                                            | Ethernet Port | Serial Port          | <IO/NA>: I/O   | <W/NA>: WLAN&BLE | <G/NA>: GPS |
| IG502-FF53-W-G                        | EMEA CAT1<br>LTE-FDD Band1/3/7/8/20/28<br>GSM/GPRS/EDGE Band3/8                                                                                   | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES         |
| IG502-FF53-IO-W-G                     | EMEA CAT1<br>LTE-FDD Band1/3/7/8/20/28<br>GSM/GPRS/EDGE Band3/8                                                                                   | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES         |
| IG502-FF53-D485-IO-W-G                | EMEA CAT1<br>LTE-FDD Band1/3/7/8/20/28<br>GSM/GPRS/EDGE Band3/8                                                                                   | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES         |
| IG502-FQ58                            | EMEA CAT4<br>LTE-FDD Band1/3/7/8/20/28A<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None        |
| IG502-FQ58-IO                         | EMEA CAT4<br>LTE-FDD Band1/3/7/8/20/28A<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None        |
| IG502-FQ58-W-G                        | EMEA CAT4<br>LTE-FDD Band1/3/7/8/20/28A<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES         |
| IG502-FQ58-IO-W-G                     | EMEA CAT4<br>LTE-FDD Band1/3/7/8/20/28A<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES         |
| IG502-FQ58-D485-IO-W-G                | EMEA CAT4<br>LTE-FDD Band1/3/7/8/20/28A<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES         |
| IG502-FQ58-TH                         | Thailand CAT4<br>LTE-FDD Band1/3/7/8/20<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None        |
| IG502-FQ58-IO-TH                      | Thailand CAT4<br>LTE-FDD Band1/3/7/8/20<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None        |
| IG502-FQ58-W-G-TH                     | Thailand CAT4<br>LTE-FDD Band1/3/7/8/20<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES         |
| IG502-FQ58-IO-W-G-TH                  | Thailand CAT4<br>LTE-FDD Band1/3/7/8/20<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES         |
| IG502-FQ58-D485-IO-W-G-TH             | Thailand CAT4<br>LTE-FDD Band1/3/7/8/20<br>WCDMA Band1/8<br>GSM Band3/8                                                                           | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES         |
| IG502-FQ78                            | Australia & Latin America CAT4<br>LTE-FDD Band1/2/3/4/5/7/8/28<br>LTE-TDD B40<br>UMTS(DC-HSPA+) Band1/2/5/8<br>EDGE/GPRS/GSM 850/900/1800/1900MHz | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None        |
| IG502-FQ78-IO                         | Australia & Latin America CAT4<br>LTE-FDD Band1/2/3/4/5/7/8/28<br>LTE-TDD B40<br>UMTS(DC-HSPA+) Band1/2/5/8<br>EDGE/GPRS/GSM 850/900/1800/1900MHz | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None        |
| IG502-FQ78-W-G                        | Australia & Latin America CAT4<br>LTE-FDD Band1/2/3/4/5/7/8/28<br>LTE-TDD B40<br>UMTS(DC-HSPA+) Band1/2/5/8<br>EDGE/GPRS/GSM 850/900/1800/1900MHz | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES         |
| IG502-FQ78-IO-W-G                     | Australia & Latin America CAT4<br>LTE-FDD Band1/2/3/4/5/7/8/28<br>LTE-TDD B40<br>UMTS(DC-HSPA+) Band1/2/5/8<br>EDGE/GPRS/GSM 850/900/1800/1900MHz | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES         |

# Ordering Guide

| Model code:IG502-<WMNN>-<W/NA>-<G/NA> |                                                                                                                                        |               |                      |                |                  |            |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------|----------------|------------------|------------|
| Model                                 | <WMNN>: Cellular Type & Frequency Band                                                                                                 | Ethernet Port | Serial Port          | <IO/NA>: I/O   | <W/NA>: WLAN&BLE | <G/NA>:GPS |
| IG502-FQ78-D485-IO-W-G                | Australia & Latin America CAT4 LTE-FDD Band1/2/3/4/5/7/8/28 LTE-TDD B40 UMTS(DC-HSPA+) Band1/2/5/8 EDGE/GPRS/GSM 850/900/1800 /1900MHz | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES        |
| IG502-EN00                            | Global, no cellular                                                                                                                    | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | None             | None       |
| IG502-EN00-IO                         | Global, no cellular                                                                                                                    | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | None             | None       |
| IG502-EN00-W-G                        | Global, no cellular                                                                                                                    | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | None           | YES              | YES        |
| IG502-EN00-IO-W-G                     | Global, no cellular                                                                                                                    | 2x 10/100Mbps | RS232 x1<br>RS485 x1 | 4x DI<br>4x DO | YES              | YES        |
| IG502-EN00-D485-IO-W-G                | Global, no cellular                                                                                                                    | 2x 10/100Mbps | RS485 x2             | 4x DI<br>4x DO | YES              | YES        |

## About Us

InHand Networks is a leading IoT solutions provider founded in 2001, dedicated to driving digital transformation across industries and empowering customers to unlock their full potential and achieve accelerated growth.

We specialize in delivering industrial-grade connectivity solutions for diverse sectors, such as enterprise networks, industrial and building IoT, digital energy, smart commerce, and mobility. Our comprehensive product portfolio and services cater to various applications worldwide, including smart manufacturing, smart grid, intelligent transportation, smart retail, etc. With a global footprint spanning over 60 countries, we serve customers in China, the United States, France, Germany, the United Kingdom, Italy, and beyond.



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