# *IDS-342GT*

## *Industrial 4-port secure serial to Ethernet device server with 4xRS-232/422/485 and 2x10/100/1000Base-T(X)*

## Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP, Modbus Gateway
- Support Modbus Gateway: Modbus TCP, Modbus RTU and Modbus ASCII
- Support ORing Open Gateway (protocol converter) software feature for easy and quick IIoT deployment.
- Redundant multiple host devices:
  5 host devices: Virtual COM, TCP Server, TCP Client mode;
  4 IP ranges: UDP
- Support Modbus Gateway : Modbus TCP, Modbus RTU, Modbus ASCII
- Support 2 Gigabit Ethernet ports for high speed data transmission
- Security: SSL data encryption; secured management by HTTPS and SSH
- Supports 9.6K Bytes Jumbo Frame
- Event Warning by Syslog, SNMP trap, Relay and Beeper
- Configurable by Web-based and Windows utility (**DS-Tool**)
- Various Windows O.S. supported:
  Windows NT/2000/ XP/ 2003/VISTA(32/64bit)/ Windows 7(32/64bit)


SSL | -40~70°C Temperature | Redundant PWR | OpenGateway | PoE/PD | Sparkplug MQTT Topic & Payload Definition | CoAP | MQTT | Modbus | RoHS Lead Free | FC | CE

## Introduction

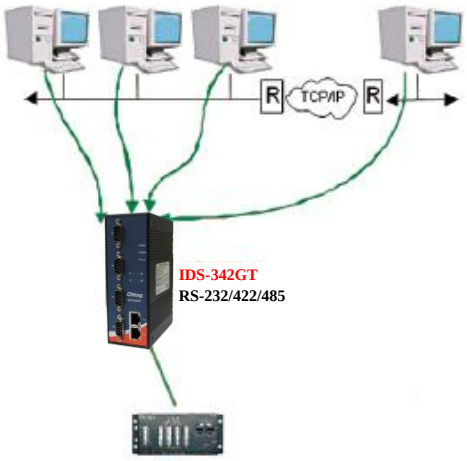
IDS-342GT is an innovative secure 4 port RS-232/422/485 to 2 ports Gigabit Ethernet secure device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, and UDP. In addition, the Windows untility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. On the other hand, IDS-342GT can simultaneously transfer data up to 5 redundant host PCs to aovid Ethernet connection breakdown or any host PC fails. Further, IDS-342GT features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-342GT supports RS-232/422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to guarantee a non-stop operation. With wide operating temperature, -40~70°C, and rugged IP-30 housing design,

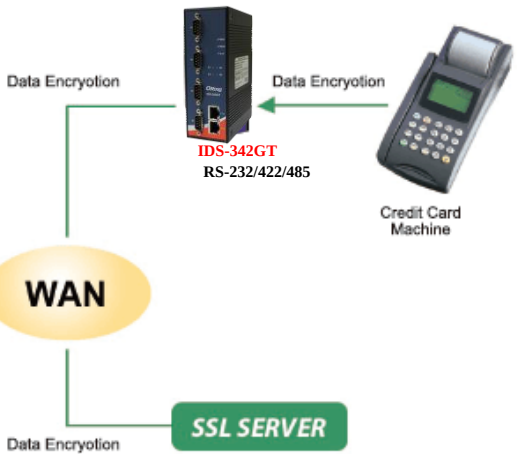
IDS-342GT series could operate in the harsh industrial environment. Therefore, IDS-342GT is the best solution to the high demand of secure serial to Ethernet critical data communication.

## Practical Operation

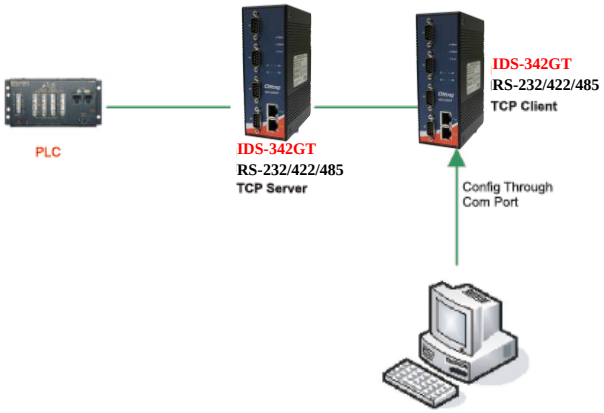
In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers on the industrial network.



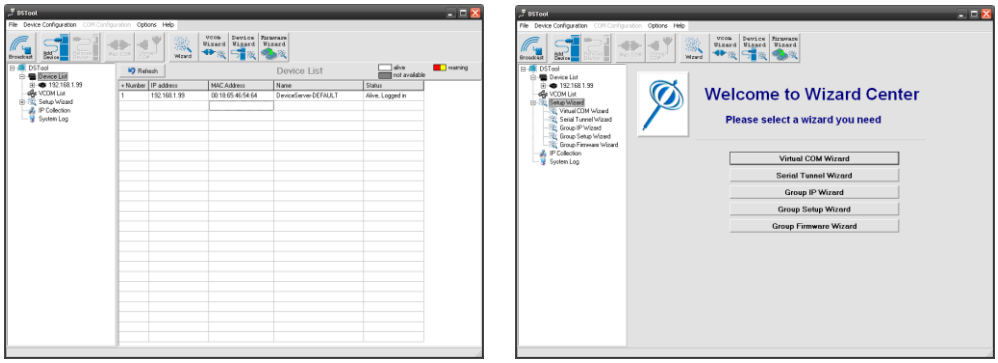

**Multiple Host PCs**




**SSL Data Encryption**

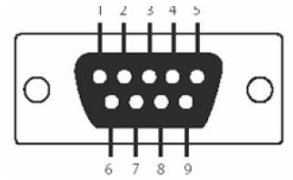



**TCP Client/Server Modes**




**DS-Tool (Windows Utility): Monitoring and Configuration**

## Pin Definition

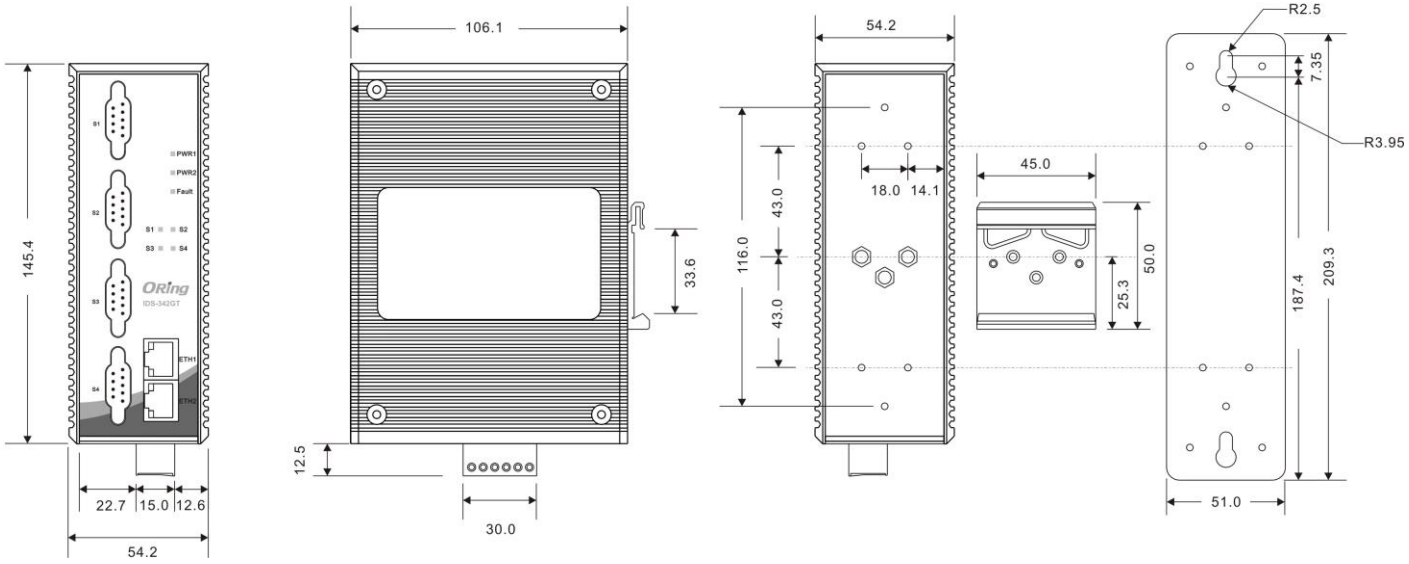



**DB9 connector**

| Pin # | RS-232 | RS-422 | RS-485 ( 4 wire ) | RS-485 ( 2 wire ) |
|---|---|---|---|---|
| 1 | DCD | TX- | TX- | DATA - |
| 2 | RXD | TX+ | TX+ | DATA + |
| 3 | TXD | RX+ | RX+ | |
| 4 | DTR | RX- | RX- | |
| 5 | GND | GND | GND | |
| 6 | DSR | | | |
| 7 | RTS | | | |
| 8 | CTS | | | |
| 9 | RI | | | |

## Dimension

Dimension (Unit =mm)



# Specifications

| ORing Device Server Model | IDS-342GT |
|---|---|
| **Physical Ports** | |
| 10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX | **2** |
| **Serial Ports** | |
| Connector | DB9 x 4 |
| Operation Mode | RS-232/422/485 |
| Serial Baud Rate | 110 bps to 921.6 Kbps |
| Data Bits | 7, 8 |
| Parity | odd, even, none, mark, space |
| Stop Bits | 1, 1.5, 2 |
| RS-232 | TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND |
| Flow Control | XON/XOFF, RTS/CTS, DTR/DSR |
| **Network Protocol** | |
| Protocol | ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS |
| Jumbo frame | Up to 9.6K Bytes |
| **LED indicators** | |
| Power indicator | PWR 1(2) / Ready:<br>Green On: Power is on and functioning Normally. |
| 10/100/1000 RJ45 port indicator | Top Green for port Link at 1000Mbps, Amber for port Link at 100Mbps, off for port Link at 10Mbps<br>Bottom Green for port Link/Act |
| Serial TX / RX LEDs: | Red: Serial port is receiving data<br>Green: Serial port is transmitting data |
| **Power** | |
| Redundant Input power | Dual DC inputs. 12-48VDC on 6-pin terminal block |
| Power consumption (Typ.) | 6.96W |
| Overload current protection | Present |
| Reverse polarity protection | Present on terminal block |
| **Physical Characteristic** | |
| Enclosure | IP-30 |
| Dimension (W x D x H) | 54.2(W)x106.1(D)x145.4(H) mm (2.13x4.18x5.72 inch.) |
| Weight (g) | 740g |
| **Environmental** | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -40 to 70°C (-40 to 158°F) |
| Operating Humidity | 5% to 95% Non-condensing |
| **Regulatory approvals** | |
| EMC | CE EMC (EN 55024, EN 55032), FCC Part 15 B |
| EMI | EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15 B class A |
| EMS | EN 55024 (IEC/EN 61000-4-2 (ESD), IEC/EN61000-4-3 (RS), IEC/EN61000-4-4 (EFT),<br>IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11(DIP)) |
| Shock | IEC60068-2-27 |
| Free Fall | IEC60068-2-31 |
| Vibration | IEC60068-2-6 |
| Safety | EN60950-1 |
| MTBF | 560362.4721 hrs |
| **Warranty** | 5 years |