



# IDS-242GT-I+

➔ **Industrial 4-port secure serial to Ethernet device server with 4xRS-422/485(2KV isolation) and 2x10/100/1000Base-T(X), 1-port PoE P.D.**

## Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP, Modbus Gateway
- 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
- 1KV isolation for PoE P.D. port
- 2KV isolation for serial port
- Supports 9K Bytes Jumbo Frame
- Event Warning by Syslog, SNMP trap, Relay
- 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)



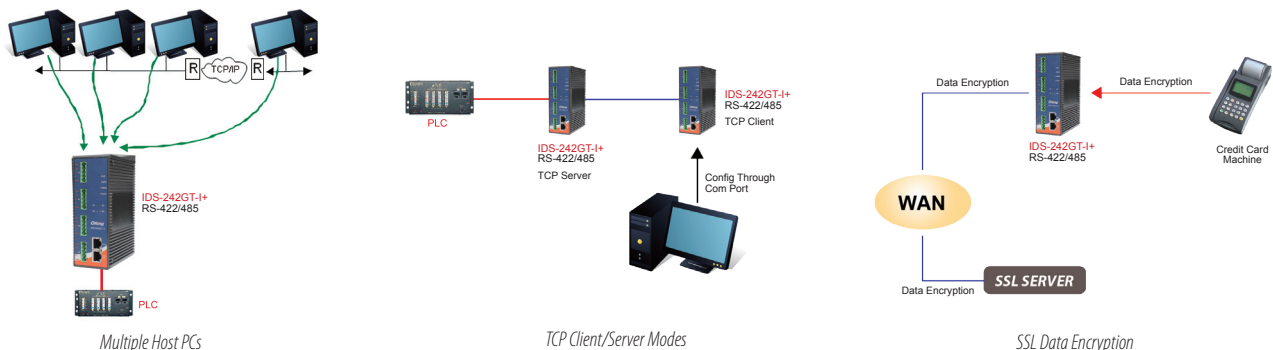
## Introduction

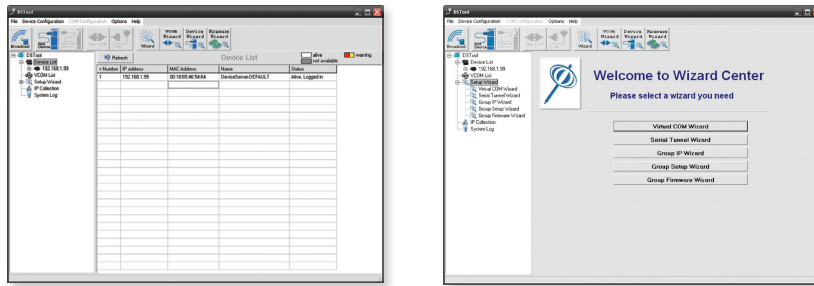
IDS-242GT-I+ is an innovative secure 4 port RS-422/485 to 2 ports Gigabit Ethernet secure device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, and UDP. In addition, the Windows utility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. Further, IDS-242GT-I+ features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-242GT-I+ supports RS-422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to guarantee a non-stop operation. In addition, IDS-242GT-I+ also provides P.D. feature at ETH2 port which is fully compliant with IEEE802.3af PoE P.D. specification to save the layout cost of power line. With wide operating temperature, -40~70°C, and rugged IP-30 housing design, IDS-242GT-I+ series could operate in the harsh industrial environment. Therefore, IDS-242GT-I+ is the best solution to the high demand of secure serial to Ethernet critical data communication.

## Practical Operation

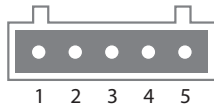
In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers on the industrial network.





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

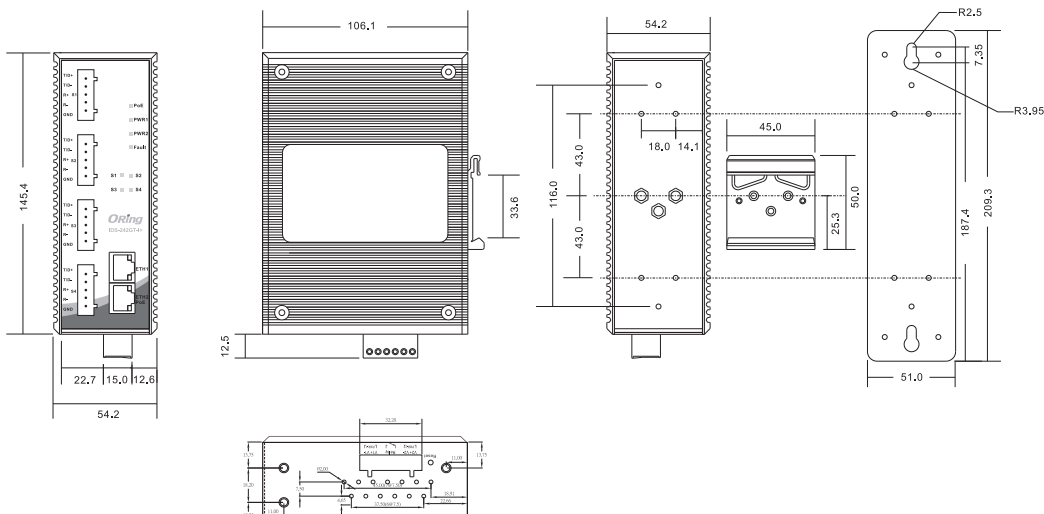
## Pin Assignment



5-Pin Terminal block connector

Pin #	RS-422	RS-485 (4 wire)	RS-485 (2 wire)
1	TXD +	TXD +	DATA +
2	TXD -	TXD -	DATA -
3	RXD +	RXD +	
4	RXD -	RXD -	
5	GND	GND	GND

## Dimensions



Unit=mm

## Specifications

ORing Switch Model	IDS-242GT-I+
<b>Physical Ports</b>	
10/100/1000 Base-T(X) Ports in RJ45	2
<b>Auto MDI/MDIX</b>	Present at ETH2 Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance : 108 ohms min
<b>Serial Ports</b>	
Connector	5 pin terminal block x 4

Operation Mode	RS-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-422	TxD+, TxD-, RxD+, RxD-,GND
RS-485 (4-wire)	TxD+, TxD-, RxD+, RxD-,GND
RS-485 (2-wire)	DATA+, DATA-, GND
Isolating	2KV
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR
<b>Network Protocol</b>	
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS
Jumbo frame	Up to 9.6K Bytes
<b>LED indicators</b>	
Power indicator	PWR 1(2) / Ready: 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 Bottom Green for port Link/Act
Serial TX / RX LEDs:	Red: Serial port is receiving data Green: Serial port is transmitting data
<b>Power</b>	
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block
Power consumption (Typ.)	6.96 W
Overload current protection	Present
Reverse polarity protection	Present on terminal block
<b>Physical Characteristic</b>	
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)	705g
<b>Environmental</b>	
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
<b>Regulatory approvals</b>	
EMI	FCC Part 15 B, CISPR (EN55032) 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	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950-1
Warranty	5 years

## Ordering Information

IDS-2 **A** **B** **CC** - **D** **E**

Code Definition	Serial Port Type	Serial Port Number	Serial Port Number	Serial Port Number	10/100Base-T(X) port Number	Serial Port Number
<b>Option</b>	- <b>1: RS-232</b> - <b>2: RS-422/485</b> - <b>3: RS-232/422/485</b>	- <b>4:</b> 4 ports	- <b>2:</b> 2 ports	- <b>GT:</b> Gigabit Ethernet	- <b>I:</b> Serial port are isolated RS-422/485	- <b>"+":</b> PoE P.D. present at ETH2

Available Model	Model Name	Description
	IDS-242GT-I+	Industrial 4-port secure serial to Ethernet device server with 4x RS-422/485(2KV isolation) and 2x10/100/1000Base-T(X), 1-port PoE P.D.
<b>Packing List</b> <ul style="list-style-type: none"> <li>IDS-242GT-I+ x 1</li> <li>DIN-rail Kit x 1</li> <li>CD x 1</li> <li>Wall-mount Kit x 1</li> <li>Quick Installation Guide x 1</li> </ul>		<b>Optional Accessories</b> <ul style="list-style-type: none"> <li>DR-45 series : 45 Watts power supply</li> <li>DR-120 series : 120 Watts power supply</li> <li>DR-75 series : 75 Watts power supply</li> </ul>

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software