

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

### Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Support 2xRS-232/422/485 in DB9 connector
- Support **Modbus TCP/RTU** industrial protocols
- Redundant multiple host devices:  
5 host devices: Virtual COM, TCP Server, TCP Client mode;  
4 IP ranges: UDP
- Security: SSL data encryption; secured management by HTTPS and SSH: IP Access: IP White List
- Event Warning by Syslog, Email, 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)
- Ethernet switch mode enable Daisy Chain
- Support RTC
- Support Linux OpenWRT SDK for project



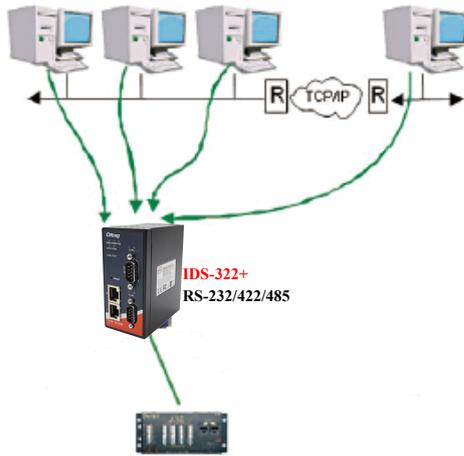
### Introduction

IDS-322 is an innovative secure 2 port RS-232/422/485 to 2 ports LAN 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. On the other hand, IDS-322 can simultaneously transfer data up to 5 redundant host PCs to avoid Ethernet connection breakdown or any host PC fails. Further, IDS-322 features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

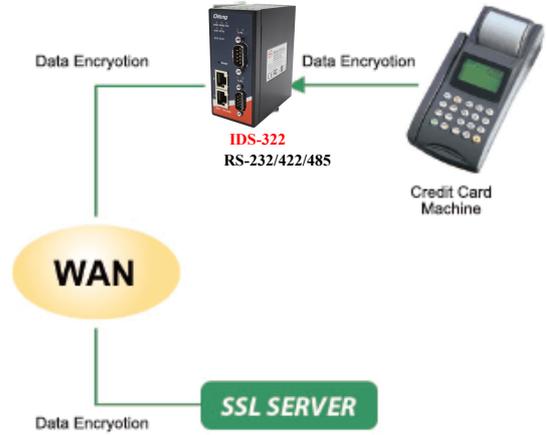
IDS-322 supports RS-232/422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to guarantee a non-stop operation. With wide operating temperature, -40~70°C, and rugged IP-30 housing design, IDS-322 series could operate in the harsh industrial environment. Therefore, IDS-322 is the best solution to the high demand of secure serial to Ethernet critical data communication.

## Practical Operation

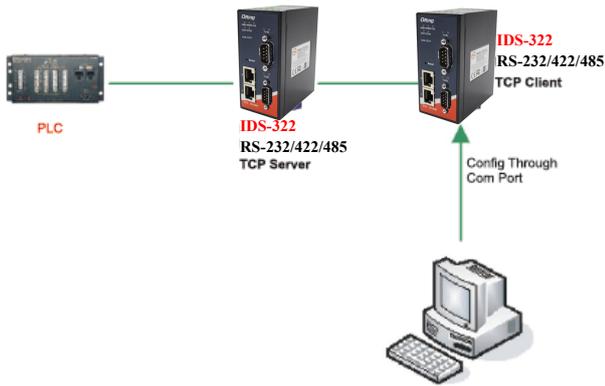
In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers on the industrial network.



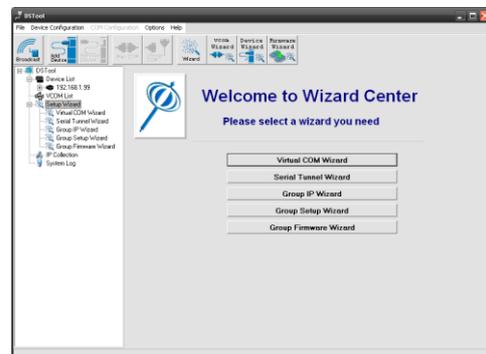
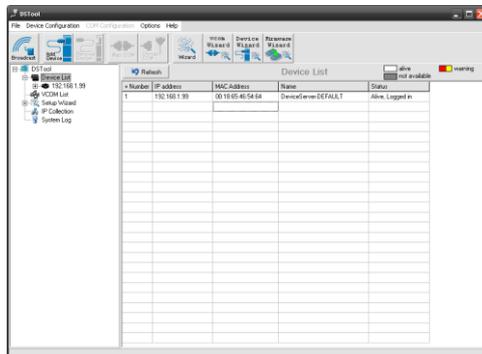
Multiple Host PCs



SSL Data Encryption

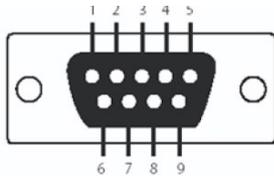


TCP Client/Server Modes



DS-Tool (Windows Utility): Monitoring and Configuration

## Pin Definition

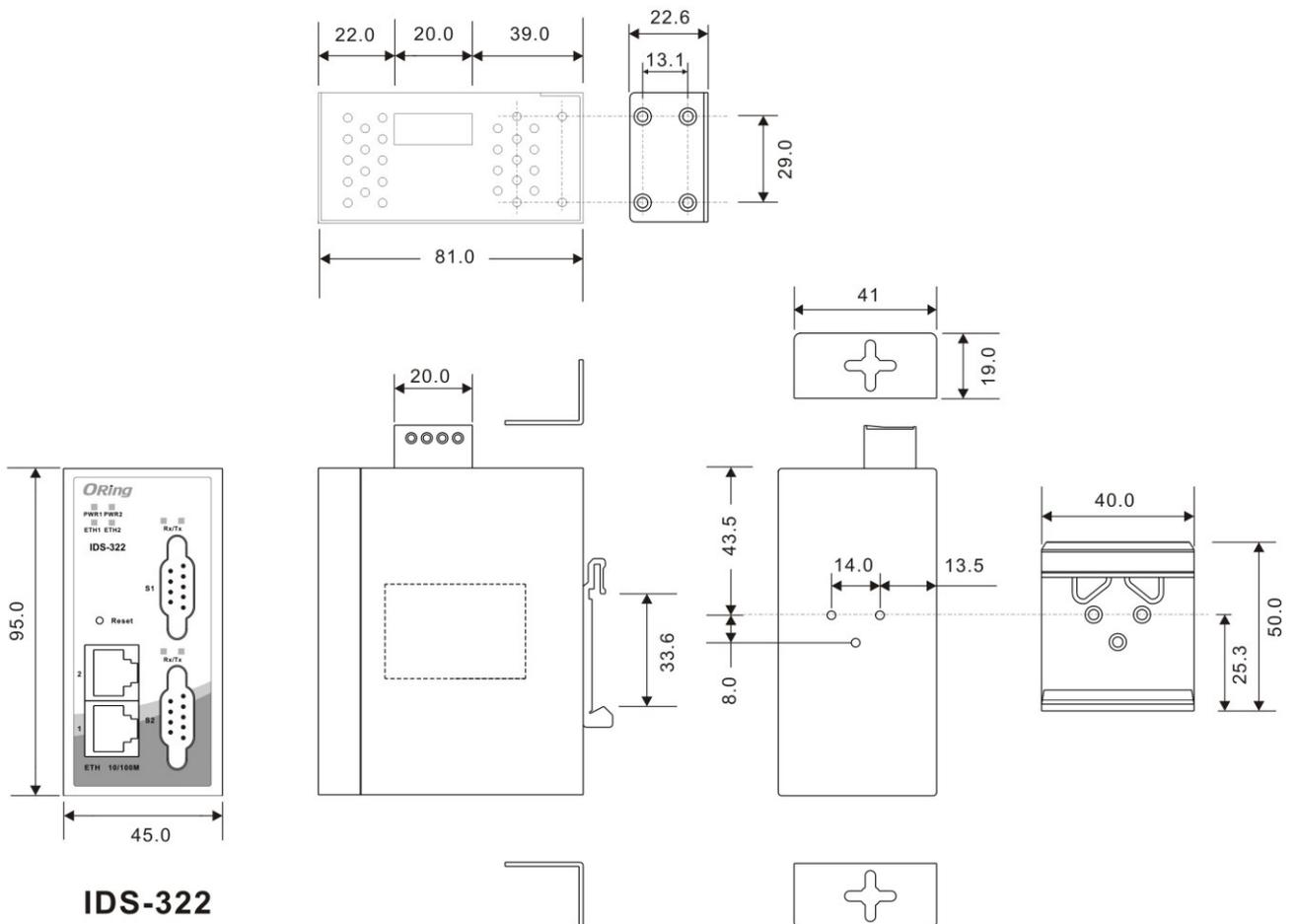


DB9 connector

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)



IDS-322

## Specifications

<b>ORing Device Server Model</b>	<b>IDS-322</b>
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	<b>2</b>
<b>Serial Ports</b>	
Connector	DB9 x 2
Operation Mode	RS-232/422/485
Serial Baud Rate	110 bps to 460.8 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
<b>Network Protocol</b>	
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP
<b>LED indicators</b>	
Power indicator	3 x LEDs, PWR 1(2)(PoE) / Ready: Green On: Power is on
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps.
Serial TX / RX LEDs:	Amber: 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.)	3.84W
Overload current protection	Present
Reverse polarity protection	Present on terminal block
<b>Physical Characteristic</b>	
Enclosure	IP-30
Dimension (W x D x H)	45 (W) x 81 (D) x 95 (H) mm
Weight (g)	316g
<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, CISPR (EN55022) 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
<b>Warranty</b>	<b>5 years</b>

## Packing List

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- **IDS-322 x 1**
- **Wall-Mount Kit x 1**
- **CD x 1**
- **Din-Rail Kit x 1**
- **Quick Installation Guide x 1**

## Optional Accessories

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- **DR-45 series : 45 Watts power supply**
- **DR-75 series : 75 Watts power supply**
- **DR-120 series : 120 Watts power supply**