



# IDS-312L

## Industrial secure serial port to Ethernet device server with 1xRS-232/422/485 and 2x10/100Base-T(X)

### Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP and 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.
- Support 1xRS-232/422/485 in DB9 connector
- 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
- 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)

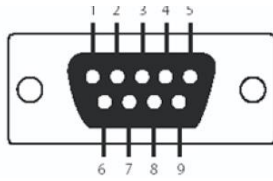


### Introduction

IDS-312L is an innovative secure 1 port RS-232/422/485 to 2 port LAN 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-312L can simultaneously transfer data up to 5 redundant host PCs to avoid Ethernet connection breakdown or any host PC fails. Further, IDS-312L features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-312L 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-312L series could operate in the harsh industrial environment. Therefore, IDS-312L is the best solution to the high demand of secure serial to Ethernet critical data communication.

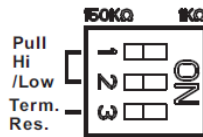
## Pin Definition



DB9 connector

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

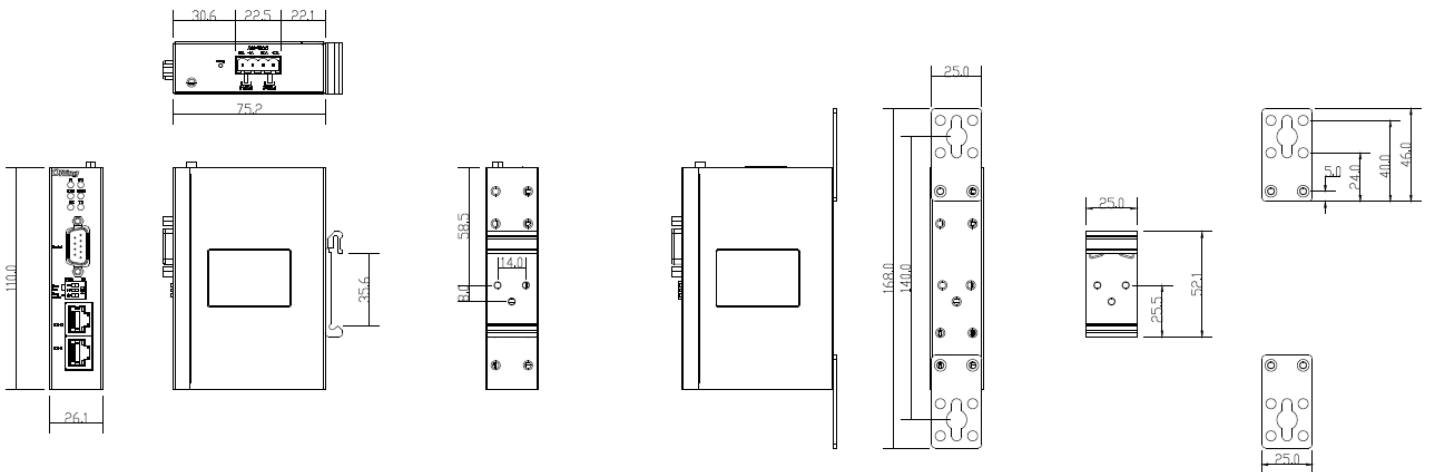
## DIP Switch



SW No.	Description
# 1	150K / 1K Ohm Pull High/Low Resistor
# 2	
# 3	Enable / Disable Terminal Resistor

## Dimension

Unit: mm



## Specifications

<b>ORing Device Server Model</b>	IDS-312L
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	2
<b>Serial Ports</b>	
Connector	DB9 x 1
Operation Mode	RS-232/422/485
Serial Baud Rate	1200 bps to 460800bps (Max. 921.6 Kbps)
Data Bits	7, 8
Parity	odd, even, none, mark, space
Stop Bits	1, 1.5, 2
RS-232	TxD, Rx D, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx-, Tx+, Rx+, Rx-
RS-485	4 wire: Tx-, Tx+, Rx+, Rx- 2 wire: Data-, Data+
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	2 x LEDs, PWR 1(2) / 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 4-pin terminal block
Power consumption (Typ.)	4.8w Max. (0.05A-0.1A)
Overload current protection	Present
Reverse polarity protection	Present
<b>Physical Characteristic</b>	
Enclosure	IP-30
Dimension (W x D x H)	26 (W) x 75 (D) x 110 (H) mm (1.02 x 2.95 x 4.33 inch)
Weight (g)	227g
<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
Operating Altitude	Up to 2000 m
<b>Regulatory approvals</b>	
EMC	CE EMC (EN 55024, EN 55032), FCC Part 15B
EMI	EN 55032 CISPR 32, EN 61000-3-2, EN 61000-3-3 FCC Part 15B Class A
EMS	EN 55024 (IEC/EN61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), 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, UL61010-1, UL61010-2-201
MTBF	1479078 hrs
Warranty	5 years

## Ordering Information

IDS-3ABL

Code Definition	Serial Port Type	Serial Port Number	10/100Base-T(X) port Number
Option	- 1: RS-232 - 2: RS-422/485 - 3: RS-232/422/485	- 1: 1ports	- 2: 2 ports

Available Model	Model Name	Description
	IDS-312L	Industrial 1 secure serial port to Ethernet device server with 1xRS-232/422/485 and 2x10/100Base-T(X)

## Packing List

- IDS-312L x 1
- Wall-Mount Kit x 2
- CD x 1
- Din-Rail Kit x 1
- Quick Installation Guide x 1

## Optional Accessories

- DR/SDR/DRP Series DIN-Rail power supply