

IDS-5042-I+

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

Features

- Operating Modes : Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Redundant multiple host devices :
5 host devices : Virtual COM, TCP Server, TCP Client mode
4 IP ranges : UDP
- NAT Pass-Through: the user can manage IDS-5042-I+ through NAT router
- Security : SSL data encryption; secured management by HTTPS and SSH
IP Access : IP White List
- Internet Communication : PPPoE authentication
- Update DNS Hostname : DDNS
- Dual redundant Ethernet port support redundant mode
(Recovery time < 10ms)
- Ethernet switch mode enable Daisy Chain
- 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)/Windows7(32/64bit)
- 2KV isolation for RS422/485 serial ports
- 1KV isolation for PoE P.D. port



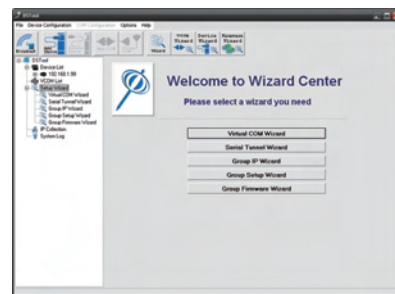
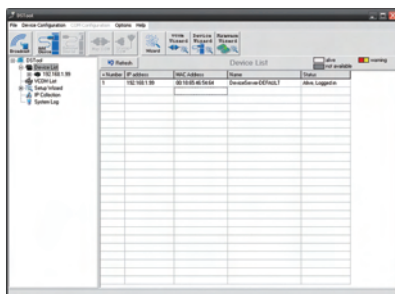
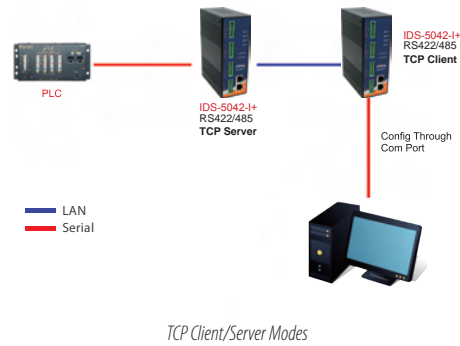
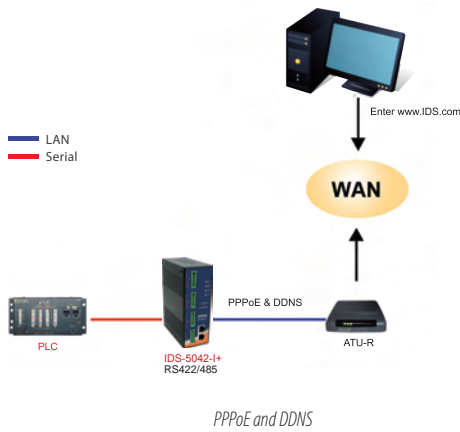
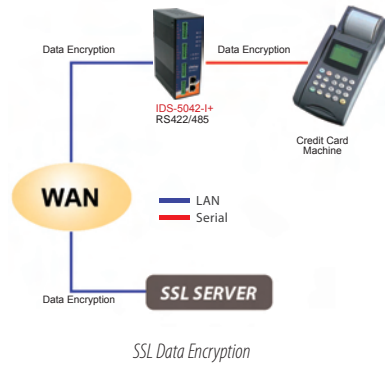
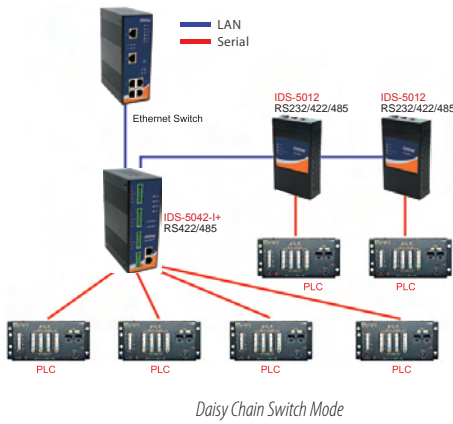
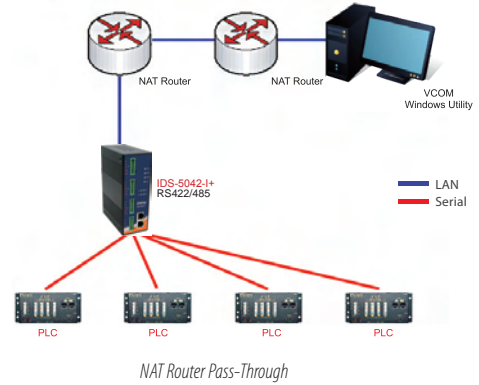
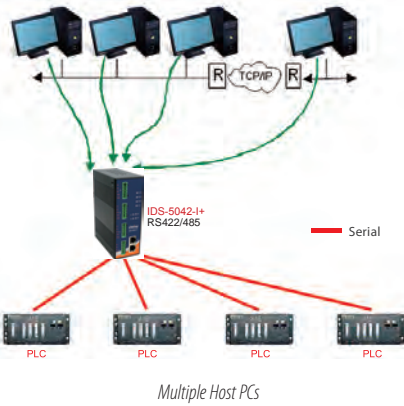
Introduction

IDS-5042-I+ is an innovative secure 4-port RS-422/485 to 2 ports LAN secure device server with isolation featuring the standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP. In addition, the Windows utility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. The features of NAT Router Pass-Through, DDNS, and PPPoE make it more convenient for administrators to configure ORing's device servers through NAT router from different IP domains or Internet via modem remotely. On the other hand, IDS-5042-I+ can simultaneously transfer data up to 5 redundant host PCs to avoid Ethernet connection breakdown or any host PC fails. Further, IDS-5042-I+ features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-5042-I+ supports RS-422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to guarantee a non-stop operation. RS-422/485 serial ports are with 2KV isolation. Further, IDS-5042-I+ features PoE P.D. (Power Device) function, compliant with IEEE802.3af standard, with 1kv isolation on the PoE port. With wide operating temperature, -10~70°C, and rugged IP-30 housing design, IDS-5042-I+ could operate in the harsh industrial environment. Therefore, IDS-5042-I+ is the best solution to the high demand of secure serial to Ethernet critical data communication.

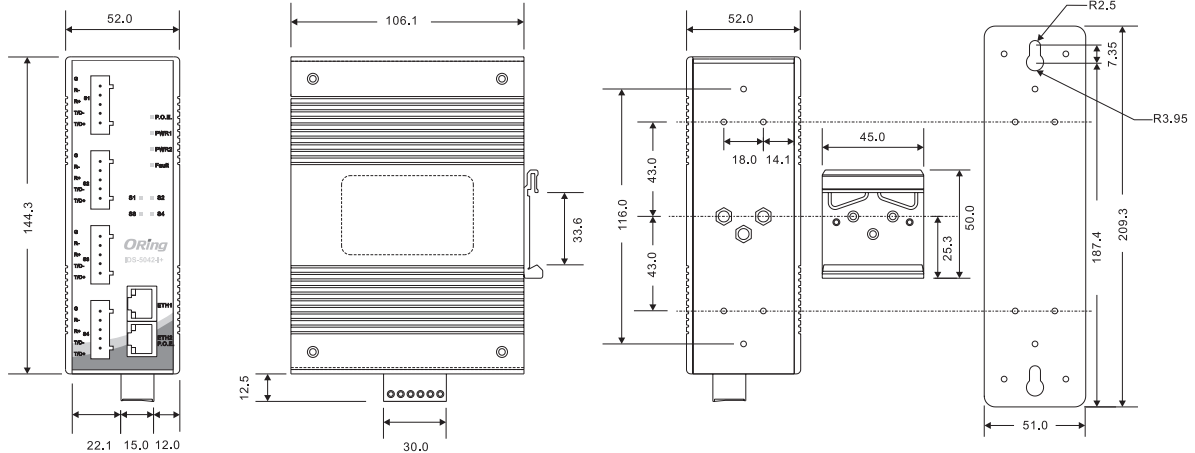
Practical Operation

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 in the industrial network.



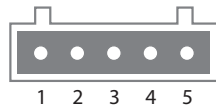
DS-Tool (Windows Utility) : Monitoring and Configuration interface

Dimensions



Unit=mm

Pin Assignment



5-Pin Terminal block connector

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

Specifications

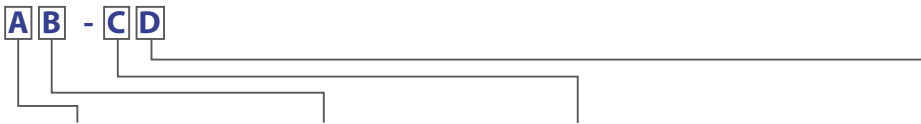
ORing Device Server Model	IDS-5042-I+
Physical Ports	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	2
PoE P.D. port	PoE P.D. dPresent at ETH2 Power Device (IEEE 802.3af) : IEEE 802.3af compliant input interface Over load and short circuit protection Isolation Voltage : 1000VDC min. Isolation Resistance : 10 ⁹ ohms min
Serial Ports	
Connector	5-pin terminal block x 4
Operation Mode	RS-422 / 4(2)-Wire RS-485. Which can be configured by DS-Tool
Serial Baud Rate	110 bps to 460.8 Kbps
Data Bits	5, 6, 7, 8
Parity	odd, even, none, mark, space
Stop Bits	1, 1.5, 2
RS-422	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (4-wire)	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (2-wire)	Data+, Data-,GND
Isolating	2KV
Flow Control	XON/XOFF
Network Features	
Network Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP, SSL, PPPoE, DDNS
LED Indicators	

Industrial Ethernet Switch
Industrial Media Converter
Industrial Device Server
Industrial Wireless Access Point
Industrial Cellular VPN Router
Industrial M2M Gateway
Accessories
Network Management Software

Power Indicator	PWR 1(2)(PoE)/ Ready : Red On: Power is on and booting up. Red Blinking : Indicates an IP conflict, or DHCP or BOOTP server did not respond properly. Green On : Power is on and functioning Normally. Green Blinking: Located by Administrator.
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.
Serial TX / RX LEDs	Red : Serial port is receiving data Green : Serial port is transmitting data
Fault Contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input Power	Triple DC Inputs,48VDC from PoE and Dual DC inputs. 12~48VDC on 6-pin terminal block
Power Consumption (Typ.)	5.5 watts
Overload Current Protection	Present
Reverse Polarity Protection	Present
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	52(W) x 106.1(D) x 144.3(H) mm (2.05x4.18x5.68 inch.)
Weight (g)	667 g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-10 to 70°C (14 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
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
MTBF (Hours) (MIL-HDBK-217F2, GB, GC, 25°C)	206,056
Warranty	5 years

Ordering Information

IDS-50 **A** **B** - **C** **D**



Code Definition	Serial Port Number	Ethernet Port Number	Serial Port Identification	PoE Identification
Option	- 4: 4 ports	- 2: 2 ports	- I: Serial port are isolated RS-422/485	- "+": PoE P.D. present at ETH2

Available Model	Model Name	Description
	IDS-5042-I+	Industrial 4-port secure serial to Ethernet device server with 4xRS-422/485 (2KV isolation) and 2x10/100Base-T(X), 1-port PoE P.D.

Packing List

- IDS-5042-I+
- DIN-Rail Kit
- Wall-mount Kit
- ORing Tool CD
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- DR-45 series, 45W DIN-Rail power supply
- DR-75 series, 75W DIN-Rail power supply
- DR-120 series, 120W DIN-Rail power supply
- SDR-240-48, 240W DIN-Rail power supply
- SDR-480-48, 480W DIN-Rail power supply
- INJ-102, High Power PoE Injector