# IDS-5042-I+

Industrial 4-port Isolate RS422/485 to 2-port 10/100TX Device Server

### **Highlights**

- · Redundant Dual Ethernet Ports: Recovery time < 10ms
- · Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- NAT-pass through: User can manage IDS-5042-I+ through
- · Redundant Power Inputs: 12~48VDC on terminal block
- Redundant multiple host devices: 5 simultaneous in Virtual COM, TCP Server, TCP Client mode, UDP
- Secured Management by HTTPS and SSH
- · Versatile Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- · Event Warning by Syslog, Email, SNMP trap, and Beeper
- Various Windows O.S. supported: Windows NT/2000/ XP/ 2003/VISTA 32-bit







#### **Features**

- · Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)
- · Ethernet switch mode enable Daisy Chain
- · Redundant 5 multiple host devices supported to protect your industrial network
- Versatile modes & event alarm by e-mail
- · HTTPs & SSH protocol supported for secured management
- · NAT router pass through
- · IP table to prevent access from unauthorized IP

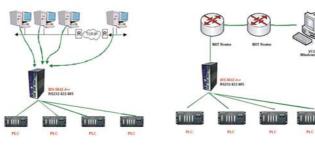
- · Configurable by Web-based and Windows utility (DS-Tool)
- · 2KV isolation for RS422/485 serial port
- · 1KV isolation for PoE PD port
- Dual redundant DC power inputs of terminal block
- · Rigid IP-30 housing design
- · DIN-Rail and panel mounting enabled

#### Introduction

IDS-5042-I+ is an innovative 4 port isolated RS422/485 to 2 ports LAN redundant device server. To assure the agility and security of critical data, IDS-5042-I+ offers many powerful features for HW & SW redundant functions. When the connection between master-link and LAN fails, IDS-5042-I+ can automatically switch to another LAN port within 10mS, and still guarantees a non-stop connection. IDS-5042-I+ also supports switch mode, users can use Daisy Chain to reduce the usage of Ethernet switch ports. Secondly, IDS-5042-I+ can simultaneously transfer data into 5 host PCs. This feature can assure all critical data that saved in different host PC to avoid Ethernet break or host PCs failure. Thirdly, IDS-5042-I+ provides dual redundant power inputs on DC power jack and terminal block. IDS-5042-I+ also provides NAT pass through function so that users are able to manage IDS-5042-I+ inside or outside the NAT router. It is easy for different IP domain users to use IDS-5042-I+. In addition, IDS-5042-I+ also support P.O.E. PD on ETH2. This feature is fully compliant with IEEE802.3af standard. Therefore, IDS-5042-I+ is one of the best communication redundant solutions for application of serial devices

## **DS-Tool**

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.

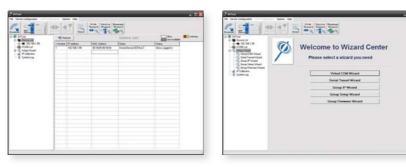


Redundancy 5 host devices

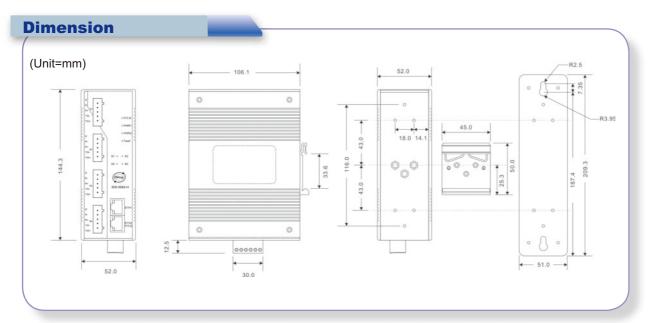
NAT router Pass Through



Daisy Chain Switch mode



Monitoring and Configuration interface

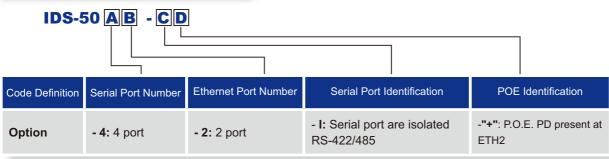


## **Specifications**

ORing Device Server Model	IDS-5042-I+
Physical Ports	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	2
P.O.E.	P.O.E.Present at ETH2 Power Device (IEEE 802.3af): IEEE 802.3af compliant input interface Power consumption: 8Watts max. Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance: 10 <sup>8</sup> ohms min
Serial Ports	
Connector	5 pin terminal block x 4
Operation Mode	RS422 / 4(2)-Wire RS485. 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, RTS/CTS, DTR/DSR
LED indicators	
Power indicator	PWR 1(2) / 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.
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps. Yellow for port Link/Act at 10Mbps.
Serial TX / RX LEDs:	Red: Serial port is receiving data Green: Serial port is transmitting data
Power	
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block and power jack
Power consumption (Typ.)	5.5 watts
Overload current protection	Present
Reverse polarity protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	52(W)x106(D)x144(H) mm (2.05x4.17x5.67 inch.)
Weight (g)	667 g
Environmental	
Storage Temperature	-40 to 85°C(-40 to 185°F)
Operating Temperature	-10 to 60°C (14 to 140°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
Warranty	5 years

# **Ordering Information**



Available Model	Model Name	Description
	IDS-5042-I+	Industrial 4-port isolate RS422/485 to 2-port 10/100TX Device Server w/ 1-port PoE PD