

IDS-342(+)

Industrial 4 secure serial port to Ethernet device server with 4xRS-232/422/485 and 2x10/100Base-T(X)

Features

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Support Modbus Gateway: Modbus TCP, Modbus RTU and Modbus ASCII
- Support 4xRS-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, Relay and
- 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
- 1KV isolation for PoE PD port (802.3af)
- Support OpenWRT SDK for project

















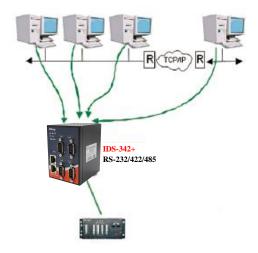
IDS-342 is an innovative secure 4 port RS-232/422/485 to 2 ports LAN secure device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, and UDP. In addition, the Windows untility, DS-Tool, could configure multiple devices and set up the mappings of Virtual Com. On the other hand, IDS-342 can simultaneously transfer data up to 5 redundant host PCs to aovid Ethernet connection breakdown or any host PC fails. Further, IDS-342 features HTTPS, SSH, and SSL encryption to assure the security of critical data transmission.

IDS-342 supports RS-232/422/485 and provides dual redundant power inputs, 12~48 VDC, on terminal block to quarantee a non-stop operation. Further, IDS-342 features PoE PD (Power Device) function, compliant with IEEE802.3af standard, with 1kv isolation on the PoE port. With wide operating temperature, -40~70°C, and rugged IP-30 housing design, IDS-342 series could operate in the harsh industrial environment. Therefore, IDS-342 is the best solution to the high demand of secure serial to Ethernet critical data communication.



Practical Operation

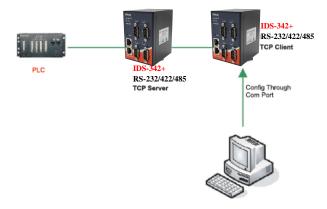
In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers on the industrial network.



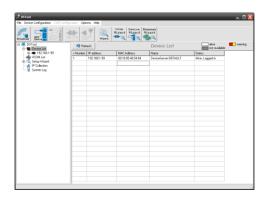
Data Encryotion

Multiple Host PCs

SSL Data Encryption



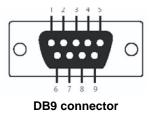
TCP Client/Server Modes





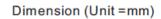
DS-Tool (Windows Utility): Monitoring and Configuration

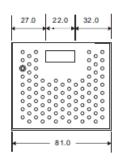
Pin Definition

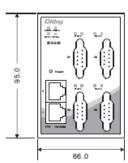


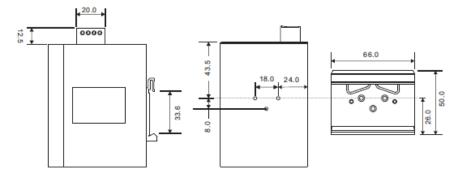
Pin #	RS-232	RS-422	RS-485 (4 wire)	RS-485 (2 wire)
1	DCD	TX-	TX-	DATA -
2	RXD	TX+	TX+	DATA +
3	TXD	RX+	RX+	
4	DTR	RX-	RX-	
5	GND	GND	GND	
6	DSR			
7	RTS			
8	CTS			
9	RI			

Dimension









IDS-342+

IDS-342

Specifications

Physical Ports 10/100 Base-T(X) Ports in R)45 Auto MDI/MDIX P.O.E. P.O.E. Present at ETH1 Power Device (IEEE 802.3af): IEEE 802.3af compliant input interface Over load & short circuit protection Isolation Voltage; 1000 VDC min. Isolation Voltage; 1000 VDC min. Isolation Voltage; 1000 VDC min. Isolation Resistance : 10 ⁸ ohms min Isolatio	ORing Device Server Model	IDS-342	IDS-342+
Auto MDI/MDIX P.O.E. P.O.E. Prosent at ETH1 Power Device (IEEE 802.3af): IEEE 802.3af compliant input interface Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Voltage: 1000 VDC min. Isolation Resistance: 10 ⁸ ohms min Serial Ports Connector D89 x 4 Operation Mode RS-232/42/485 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 Network Protocol Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators Power indicator 3 x LEDs, PWR 1(2)(PoE) / Ready: Green On: Power is on 10/100TX R345 port indicator Green for port Link/Act at 100Mbps. Serial TX / RX LEDs: Amber: Serial port is transmitting data Green: Serial port is transmitting data Green: Serial port is transmitting data Power Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) Weight (g) 375g 3849 Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Physical Ports		
Power Device (IEEE 802.3af): IEEE 802.3af compliant input interface Over load & Serial Ports Connector DB9 x 4 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 Network Protocol Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators Power indicator Green for port Link/Act at 100Mbps. Serial Tx / Rx LEDs: Green: Serial port is reasmitting data Green: Serial port is transmitting data Power Redundant Input power Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)		2	
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Serial Ports Connector DB9 x 4 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, RJ, GND Flow Control XON/XOFF, RTS/CTS, DTR/DSR Network Protocol TCMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED Indicators Power indicator 3 x LEDs, PWR 1(2)(PpE) / Ready: Green On: Power is on 10/100TX RJ45 port indicator Green On: Power is on 10/100TX RJ45 port indicator Green On: Power is on Power Redundant Input power Dual DC Inputs. 12-48VDC on 6-pin terminal block Power consumption (Typ.) 4.32W Overload current protection Present on terminal block Physical Characteristic Endosure 1P-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)			
Connector DB9 x 4 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 Network Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED Indicators Power indicator Green for port Link/Act at 100Mbps. Serial TX / RX LEDs: Green: Serial port is receiving data Green: Serial port is receiving data Green: Serial port is receiving data Power Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Power consumption (Typ.) 4.32W Overload current protection Present Reverse polarity protection Present Reverse polarity protection Present Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)			
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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 Network Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators 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. Amber: 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 IEEE 802.3af PoE PD (Eth 1) Power consumption (Typ.) 4.32W Overload current protection Present Reverse polarity protection Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Serial Baud Rate	110 bps to 460.8 Kbps	
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 Network Protocol Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators 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 receiving data Green: Serial port is receiving data Power Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Dual DC inputs. 12-48VDC on 6-pin terminal IEEE 802.3af PoE PD (Eth 1) Power consumption (Typ.) 4.32W Overload current protection Present Reverse polarity protection Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Data Bits	7, 8	
RS-232 TXD, RXD, RTS, CTS, DTR, DSR, DCD, RI, GND Flow Control XON/XOFF, RTS/CTS, DTR/DSR Network Protocol Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators Power indicator 3 x LEDs, PWR 1(2)(PoE) / Ready:	Parity	odd, even, none, mark, space	
Flow Control XON/XOFF, RTS/CTS, DTR/DSR	Stop Bits	1, 1.5, 2	
Network Protocol Protocol ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP LED indicators 3 x LEDs, PWR 1(2)(PoE) / Ready:	RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND	
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Power indicator 3 x LEDs, PWR 1(2)(PoE) / Ready: Green On: Power is on 10/100TX RJ45 port indicator Serial TX / RX LEDs: Amber: 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 Power onsumption (Typ.) 4.32W Overload current protection Reverse polarity protection Present Reverse polarity protection Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNM	IP V1/V2c, HTTPS, SMTP
Power indicator 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 Power Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Power consumption (Typ.) Overload current protection Reverse polarity protection Present Reverse polarity protection Physical Characteristic Enclosure Dimension (W x D x H) Weight (g) 375g 384g Environmental Storage Temperature Green On: Power is on Green for port Link/Act at 100Mbps. Amber: Serial port is receiving data Green: Serial port is receiving data Dual DC inputs. 12-48VDC on 6-pin terminal block Dual DC inputs. 12-48VDC on 6-pin terminal block IEEE 802.3af PoE PD (Eth 1) Present Present Present Overload current protection Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) Ge (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental	LED indicators		
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Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block Power consumption (Typ.) Overload current protection Reverse polarity protection Present Enclosure Dual DC inputs. 12-48VDC on 6-pin terminal block Present Present Present Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) G6 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Serial TX / RX LEDs:		
Redundant Input power Dual DC inputs. 12-48VDC on 6-pin terminal block IEEE 802.3af PoE PD (Eth 1) 4.32W Overload current protection Reverse polarity protection Present Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Power		
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Reverse polarity protection Present on terminal block Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Power consumption (Typ.)	4.32W	
Physical Characteristic Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Overload current protection	Present	
Enclosure IP-30 Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Reverse polarity protection	Present on terminal block	
Dimension (W x D x H) 66 (W) x 81 (D) x 95 (H) mm Weight (g) 375g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Physical Characteristic		
Weight (g) 375g 384g Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Enclosure	IP-30	
Environmental Storage Temperature -40 to 85°C (-40 to 185°F)	Dimension (W x D x H)	66 (W) x 81 (D) x 95 (H) mm	
Storage Temperature -40 to 85°C (-40 to 185°F)	Weight (g)	375g	384g
	Environmental		
Operating Temperature -40 to 70°C (-40 to 158°F)	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 Humidity	5% to 95% Non-condensing	
Regulatory approvals	Regulatory approvals		
EMI FCC Part 15, CISPR (EN55022) class A	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 EN61000-4-8, EN61000-4-11	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	Shock	IEC60068-2-27	
Free Fall IEC60068-2-32	Free Fall	IEC60068-2-32	
Vibration IEC60068-2-6	Vibration	IEC60068-2-6	

Safety	EN60950-1
Warranty	5 years

Ordering Information



Code Definition	Serial Port Type	Serial Port Number	Ethernet port Number	POE Identification
Option	- 1: RS-232 - 2: RS-422/485 - 3: RS-232/422/485	- 4 : 4 ports	- 2: 2 ports	-"+": P.O.E. PD present at ETH1

Available	Model Name	Description
Model	IDS-342	Industrial 4-port secure serial to Ethernet device server with 4xRS-232/422/485 and 2x10/100Base-T(X)
	IDS-342+	Industrial 4-port secure serial to Ethernet device server with 4xRS-232/422/485 and 2x10/100Base-T(X), 1-port PoE P.D.

Packing List

• IDS-342(+) x 1

CD x 1

Quick Installation Guide x 1

Din-Rail Kit x 1

Optional Accessories

DR-45 series : 45 Watts power supply

DR-120 series: 120 Watts power supply

DR-75 series : 75 Watts power supply