



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 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 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
- 1KV isolation for PoE PD port



Introduction

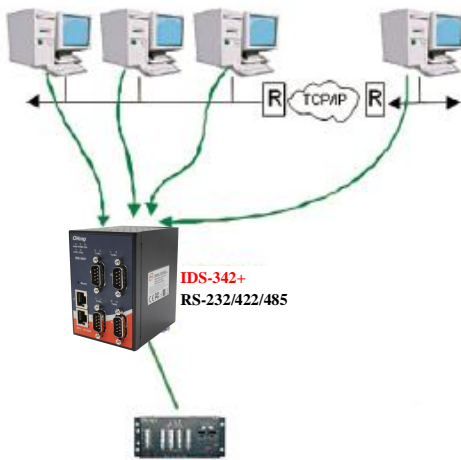
IDS-342 is an innovative secure 4 port RS-232/422/485 to 2 ports LAN secure device server with standard features of device server, such like TCP/IP interface and versatile operation modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, and UDP. In addition, the Windows utility, DS-Tool, could configure 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 avoid 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 guarantee 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.

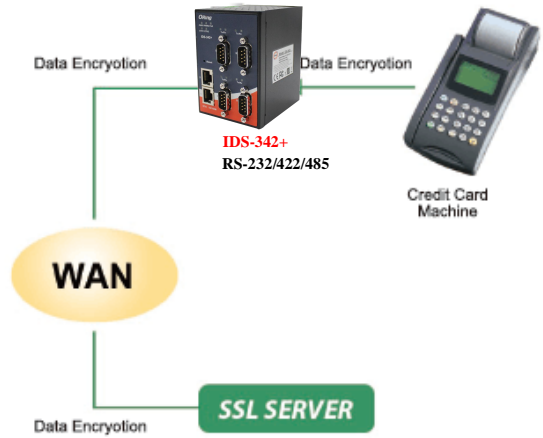
* All specifications are subject to change without notice.

Practical Operation

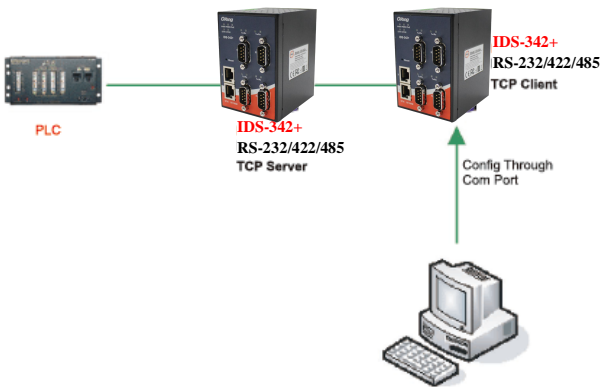
In practical operation of serial device servers, Windows utility (DS-Tool) is supported. This utility is very helpful for you to manage and monitor all of industrial device servers on the industrial network.



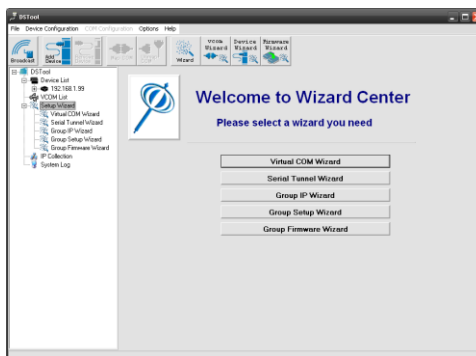
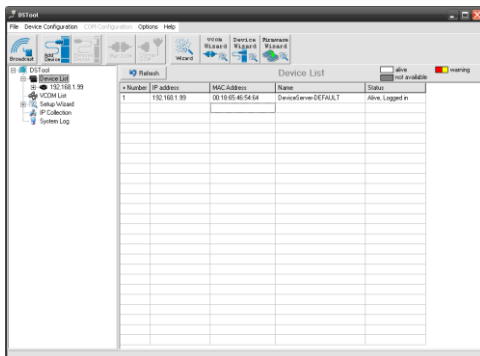
Multiple Host PCs



SSL Data Encryption



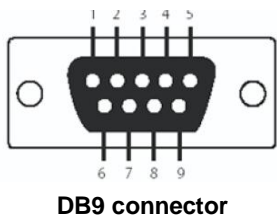
TCP Client/Server Modes



DS-Tool (Windows Utility): Monitoring and Configuration

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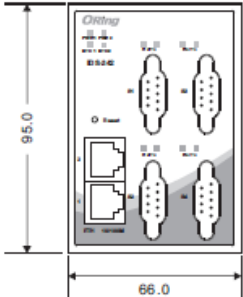
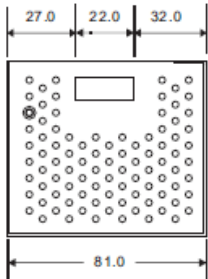
Pin Definition



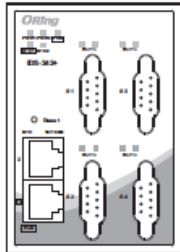
| Pin # | RS-232 | RS-422 | RS-485 (4 wire) | RS-485 (2 wire) |
|-------|--------|--------|----------------------|----------------------|
| 1 | DCD | TX- | TX- | DATA - |
| 2 | RXD | TX+ | TX+ | DATA + |
| 3 | TXD | RX+ | RX+ | |
| 4 | DTR | RX- | RX- | |
| 5 | GND | GND | GND | |
| 6 | DSR | | | |
|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

Dimension

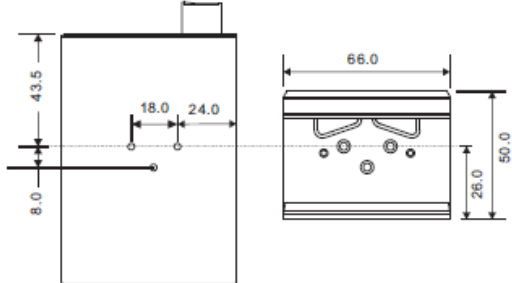
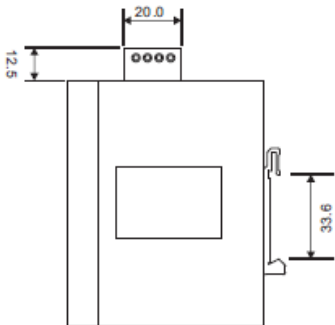
Dimension (Unit =mm)



IDS-342



IDS-342+



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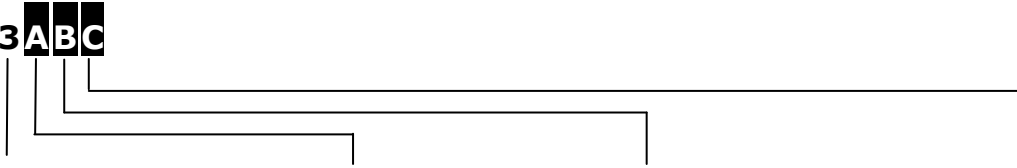
Specifications

| ORing Device Server Model | IDS-342 | IDS-342+ |
|---|---|--|
| Physical Ports | | |
| 10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX | 2 | |
| 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 Resistance : 10 ⁸ ohms min |
| 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 | 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: | 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 | 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) | |
| Operating Temperature | -40 to 70°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 | EN60950-1 | |
| Warranty | 5 years | |

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Ordering Information

IDS-3ABC



| 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 | Model Name | Description |
|-----------------|------------|--|
| | 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
- Din-Rail Kit x 1
- CD x 1
- Quick Installation Guide x 1

Optional Accessories

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