# IDS-5642

## Industrial security 4-port RS232/422/485 to 2-port 10/100TX Device Server

### Highlights

· Data Security: SSL encryption
· Internet Community: PPPoE
· Update DNS Hostname: DDNS
· Comport command support
· 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-5642 through NAT router
· 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 32bits

### 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
· Console command control
· SSL encryption for Security data transfer

· PPPoE for internet community
· DDNS for domain name service
· IP table to prevent access from unauthorized IP address
· Configurable by Web-based and Windows utility (DS-Tool)
· 1KV isolation for PoE PD port of IDS-5642+
· Dual redundant DC power inputs of terminal block
· Rigid IP-30 housing design
· DIN-Rail and panel mounting enabled

### Introduction

　　IDS-5642 is an innovative 4 port RS232/422/485 to 2 ports LAN redundant security device server.  To assure the agility and security of critical data, IDS-5642 offers many powerful features for HW & SW redundant functions.  When the connection between master-link and LAN fails, IDS-5642 can automatically switch to another LAN port within 10mS, and still guarantees a non-stop connection.  IDS-5642 also supports switch mode, users can use Daisy Chain to reduce the usage of Ethernet switch ports. Secondly, IDS-5642 can simultaneously transfer SSL encryption  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-5642 provides dual redundant power inputs on DC power jack and terminal block.  IDS-5642 also provides NAT pass through function so that users are able to manage IDS-5642 inside or outside the NAT router.  It is easy for different IP domain users to use IDS-5642.  In addition, IDS-5642+ also support P.O.E. PD on ETH2.  This feature is fully compliant with IEEE802.3af standard.  Therefore, IDS-5642 is one of the best security communication redundant solutions for application of serial devices.
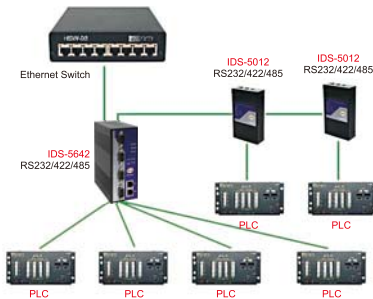
## DS-Tool

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.
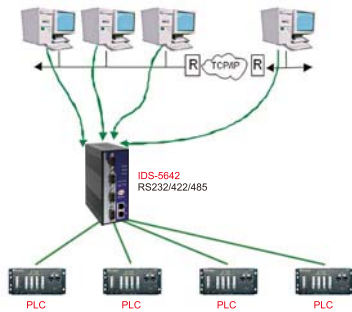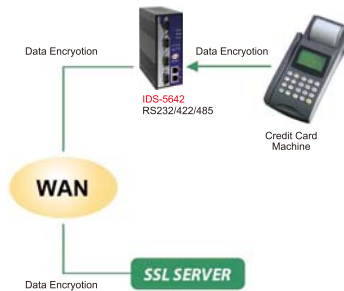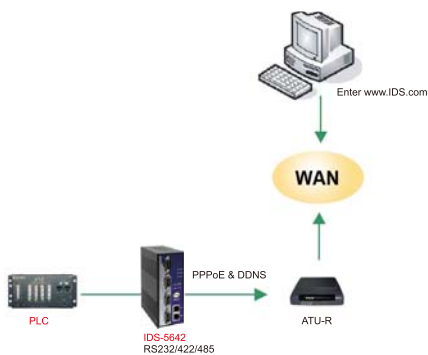


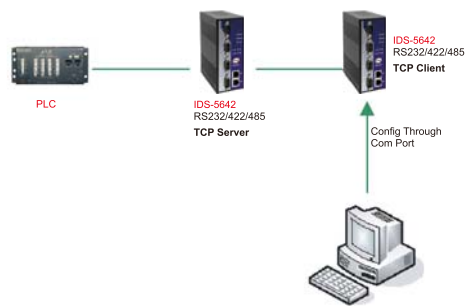Redundancy 5 Host Devices
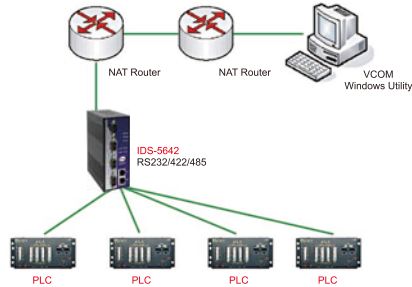


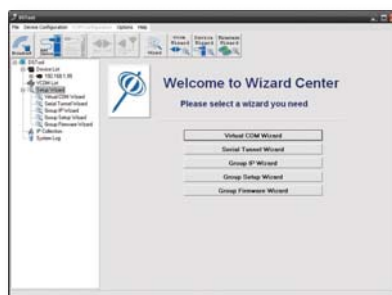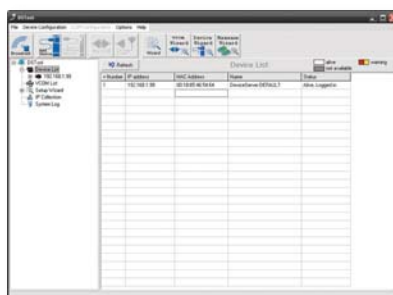NAT Router Pass Through



Daisy Chain Switch mode



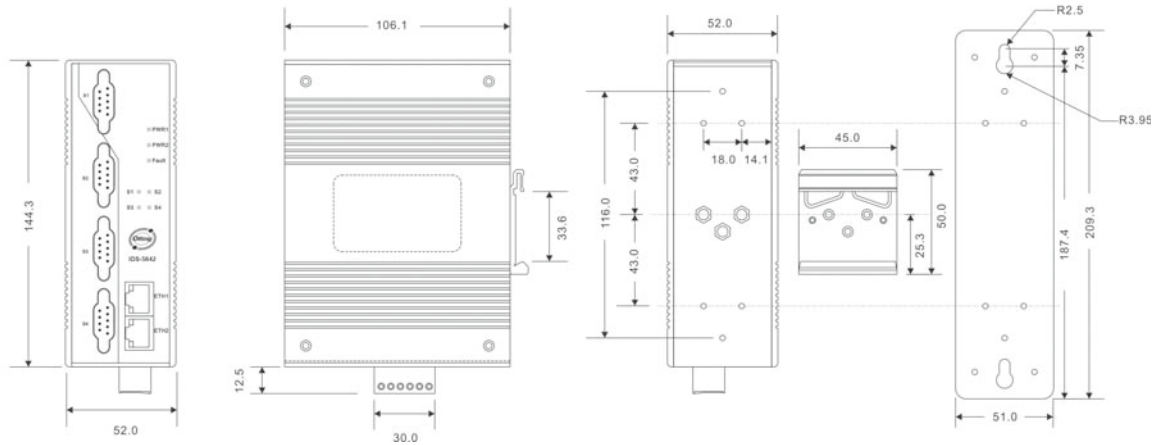SSL Data Encryption



Connect through PPPoE / DDNS



COM Port Command



Monitoring and Configuration interface

## Dimension

(Unit=mm)



## Specifications

| ORing Device Server Model | IDS-5642 | IDS-5642+ |
|---|---|---|
| **Physical Ports** | | |
| 10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX | 2 | |
| P.O.E. Feature | - | P.O.E.Present at ETH2<br>Power Device (IEEE 802.3af):<br>  IEEE 802.3af compliant input interface<br>  Power consumption: 8Watts max.<br>  Over load & short circuit protection<br>  Isolation Voltage: 1000 VDC min.<br>  Isolation Resistance : $10^8$ ohms min |
| **Serial Ports** | | |
| Connector | DB9 x 4 | |
| Operation Mode | RS232 / 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-232 | TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND | |
| RS-422 | Tx+,Tx-, Rx+, Rx-,GND | |
| RS-485 (4-wire) | Tx+,Tx-, Rx+, Rx-,GND | |
| RS-485 (2-wire) | Data+, Data-,GND | |
| Flow Control | XON/XOFF, RTS/CTS, DTR/DSR | |
| **LED indicators** | | |
| Power indicator | PWR 1(2) / Ready:<br>Red On: Power is on and booting up.<br>Red Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.<br>Green On: Power is on and functioning Normally.<br>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<br>Green: Serial port is transmitting data | |

| Power | |
|---|---|
| Redundant Input power | Dual DC inputs. 12-48VDC on 6-pin terminal block |
| 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) | 678 g 682 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

IDS-56 A B C

| Code Definition | Serial Port Number | Ethernet Port Number | WLAN Identification |
|---|---|---|---|
| **Option** | **- 4: 4 ports** | **- 2: 2 ports** | **-"+": P.O.E. PD present at ETH2** |

| | Model Name | Description |
|---|---|---|
| Available Model | DS-5642 | Industrial security 4-port RS232/422/485 to 2-port LAN Device Server |
| | DS-5642+ | Industrial security 4-port RS232/422/485 to 2-port LAN Device Server with 1-port PoE PD |