

IDS-5042-WG/5042-IWG

>> Industrial 4-port RS232/422/485 to 802.11 b/g WLAN and 2-port 10/100Base-T(X) Device Server

- Redundant Dual Ethernet Ports: Recovery time < 10ms
- Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Highly Security Capability: WEP/WPA/WPA2/TKIP supported
- NAT-pass through: User can manage IDS-5042-WG/ IWG 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 32-bit



> Features

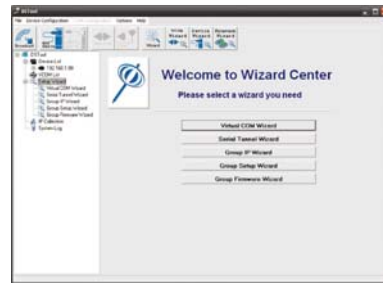
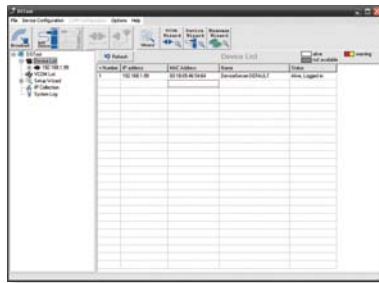
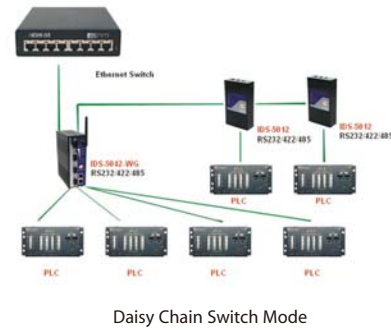
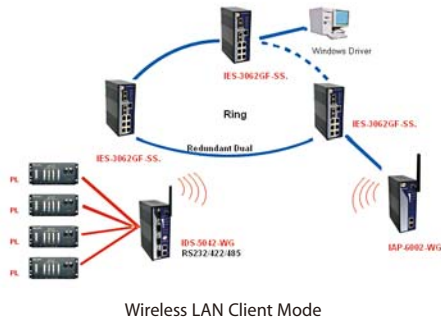
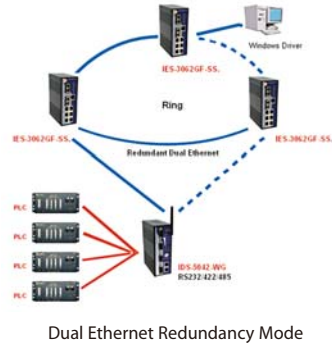
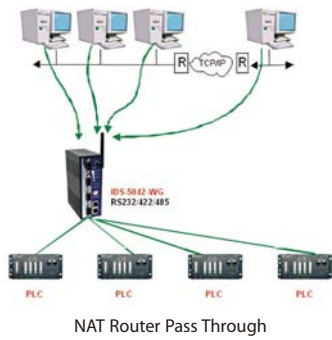
- Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)
- Ethernet switch mode enable Daisy Chain
- High Speed with a maximum link speed of 54Mbps With IEEE802.11b/g dual mode capability
- High Security Capability with WEP, WPA, WPA2, and TKIP
- Redundant 5 multiple host devices 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 address
- Configurable by Web-based and Windows utility (**DS-Tool**)
- 2KV isolation for RS422/485 serial port of IDS-5042-IWG
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

> Introduction

IDS-5042-WG is an innovative 4 ports RS232/422/485 to 802.11b/g WLAN and 2 ports LAN device server and IDS-5042-IWG with 4 ports isolated RS422/485. Users are able to configure the Switch by DS-Tool via LAN port or WLAN interface, but not simultaneously. Once LAN port is activated, WLAN interface will enter standby mode to minimize power consumption. IDS-5042-WG /IDS-5042-IWG offers many powerful features for HW & SW redundant functions. When the connection between master-link and LAN fails, IDS-5042-WG/IDS-5042-IWG can automatically switch to another LAN port within 10mS, and still guarantees a non-stop connection. IDS-5042-WG/IDS-5042-IWG also supports switch mode; users can use Daisy Chain to reduce the usage of Ethernet switch ports. Secondly, IDS-5042-WG/IDS-5042-IWG can simultaneously transfer data into 5 host PCs. This feature can assure all critical data that saved in different host PCs to avoid Ethernet break or host PCs failure. Thirdly, IDS-5042-WG /IDS-5042-IWG provides dual redundant power inputs on terminal block. IDS-5042-WG /IDS-5042-IWG also provides NAT pass through function so that users are able to manage IDS-5042-WG /IDS-5042-IWG inside or outside the NAT router. It is easy for different IP domain users to use IDS-5042-WG/IDS-5042-IWG. Therefore, IDS-5042-WG/IDS-5042-IWG is one of the best communication solution for wireless application of quad-port serial devices.

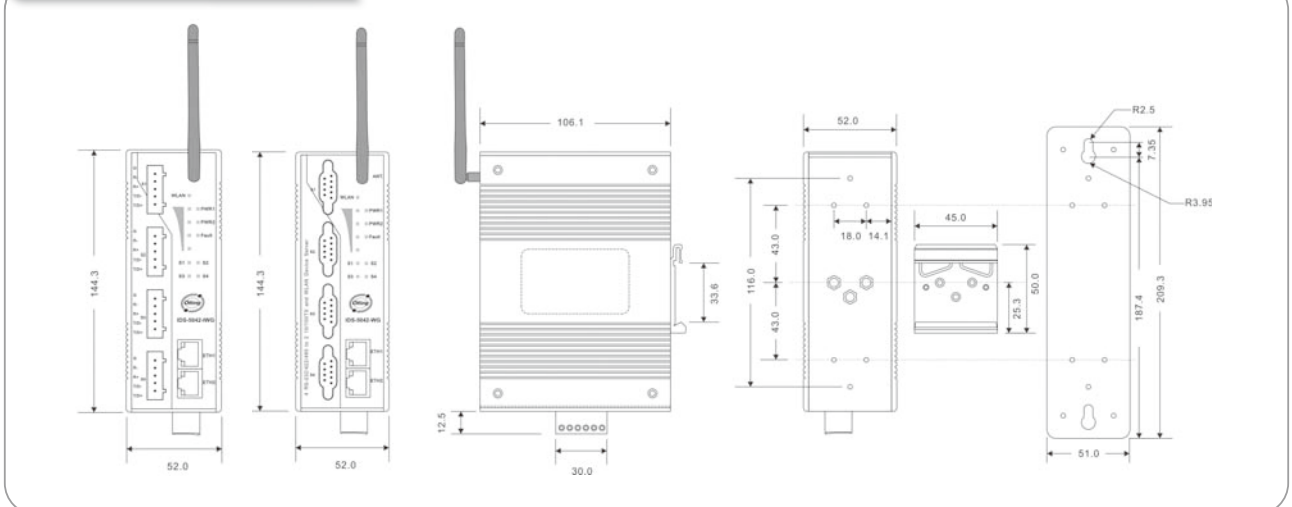
> DS-Tool

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.



Monitoring and Configuration interface

> Dimension



Unit=mm

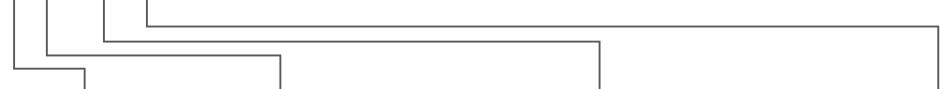
> Specifications

| ORing Device Server Model | IDS-5042-WG | IDS-5042-IWG |
|---|---|---|
| Physical Ports | | |
| 10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX | 2 | |
| WLAN Feature | | |
| Operating Mode | Client mode | |
| Antenna Connector | Reverse SMA | |
| Radio Frequency Type | DSSS | |
| Modulation | IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM | |
| Frequency Band | America/FCC: 2.412~2.462 GHz (11 channels) Europe CE/ETSI: 2.412~2.472 GHz (13 channels) | |
| Transmission Rate | IEEE802.11b: 1/ 2/ 5.5/ 11 Mbps IEEE802.11g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps | |
| Transmit Power | IEEE802.11b/g: 18dBm | |
| Receiver Sensitivity | -81dBm @ 11Mbps, PER< 8%; -64dBm @ 54Mbps, PER< 10% | |
| Encryption Security | WEP: (64-bit ,128-bit key supported) WPA: WPA2 : 802.11i(WEP and AES encryption) PSK (256-bit key pre-shared key supported) TKIP encryption | |
| Serial Ports | | |
| Connector | DB9 x 4 | 5 pin terminal block x 4 |
| Operation Mode | RS232 / RS422 / 4(2)-Wire RS485. Which can be configured by DS-Tool | 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: 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. | |
| WLAN indicator | WLAN Link /ACT: Green: Link WLAN Strength: 1<25%, 2<50%, 3<75%, 4<100% | |
| 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 | |
| Power consumption (Typ.) | 6.5 Watts | 6.5 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) x 106.1(D) x 144.3(H) mm (2.05x4.18x5.68 inch.) |
| Weight (g) | 691 g 675 g |
| Environmental | |
| Storage Temperature | -40 to 85°C(-40 to 185°F) |
| Operating Temperature | -10 to 55°C (14 to 131°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 | 3 years |

> Ordering Information

IDS-50 **A** **B** - **C** **DD**



| Code Definition | Serial Port Number | Ethernet Port Number | Serial Port Identification | WLAN Identification |
|-----------------|---------------------|----------------------|---|-----------------------------------|
| Option | - 4 : 4 port | - 2 : 2 port | - I : Serial port are isolated RS-422/485 - "" : Serial port are non-isolated RS-232/422/485 | - WG : IEEE802.11 b/g mode |

| | Model Name | Description |
|-----------------|--------------|--|
| Available Model | IDS-5042-WG | Industrial 4-port RS232/422/485 to 802.11 b/g WLAN and 2-port 10/100Base-T(X) Device Server |
| | IDS-5042-IWG | Industrial 4-port isolated RS422/485 to 802.11 b/g WLAN and 2-port 10/100Base-T(X) Device Server |