

# IDS-1112



IDS-5011-WG

## Industrial 1 secure serial port to 802.11b/g wireless device server with 1xRS232 and 1x10/100 Base-T(X)

### Features

- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Redundant multiple host devices:
  - 5 host devices: Virtual COM, TCP Server, TCP Client mode;
  - 4 IP ranges: UDP
- NAT-pass through: user can manage IDS-1112 through NAT router
- High Security Capability: SSL data encryption; secured management by HTTPS and SSH: IP Access: IP White List; wireless: WEP/WPA/WPA2/802.1X/TKIP
- Internet Communication: PPPoE
- Update DNS Hostname: DDNS
- Event Warning by Syslog, Email, SNMP trap, 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)



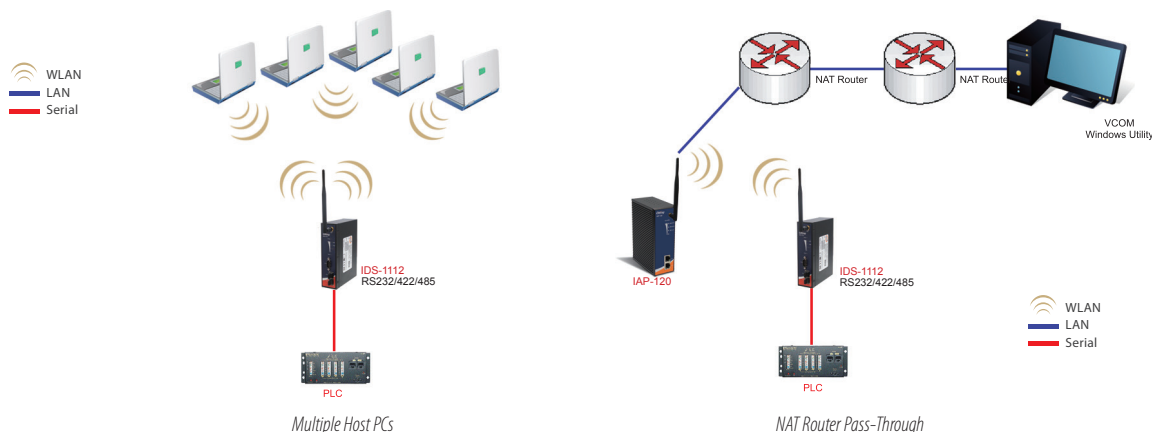
### Introduction

IDS-1112 is an innovative secure 1 port RS232 to 802.11b/g WLAN, up to 54Mbps, and 1 port LAN device server featuring the 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. The features of NAT Router Pass Through, DDNS, and PPPoE make it more convenient for administrators to configure ORing's device servers through NAT router from different IP domains or Internet via modem remotely. On the other hand, IDS-1112 can simultaneously transfer data up to 5 redundant host PCs to avoid Ethernet connection breakdown or any host PC fails. Further, IDS-1112 features HTTPS, SSH, SSL encryption, and 802.1X to assure the security of critical data transmission.

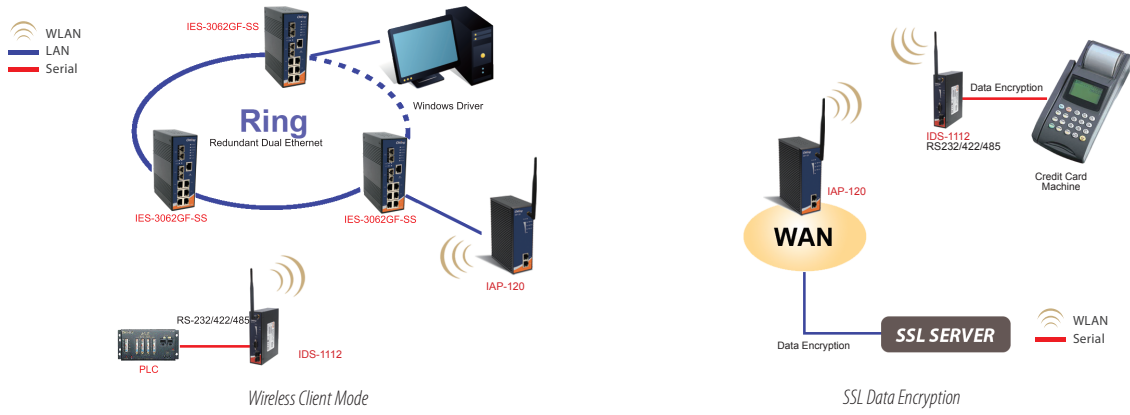
IDS-1112 supports RS-232 and provides dual redundant power inputs, 12~48 VDC, on DC power jack and terminal block to guarantee a non-stop operation. With wide operating temperature, -10~65°C, and rugged IP-30 housing design, IDS-1112 could operate in the harsh industrial environment. Therefore, IDS-1112 is the best solution to the high demand of secure serial to WLAN 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.

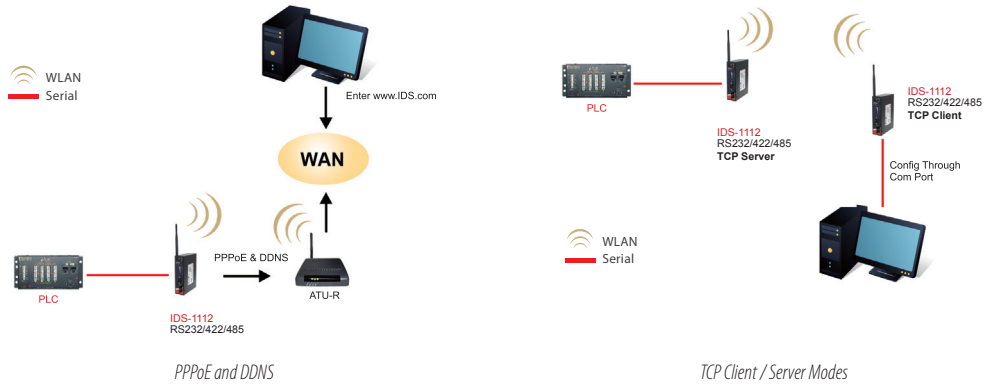


Industrial Ethernet Switch  
Industrial Media Converter  
Industrial Device Server  
Industrial Wireless Access Point  
Industrial Cellular VPN Router  
Accessories  
Network Management Software



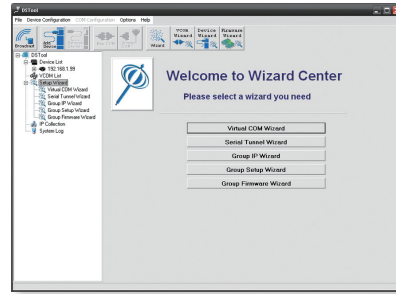
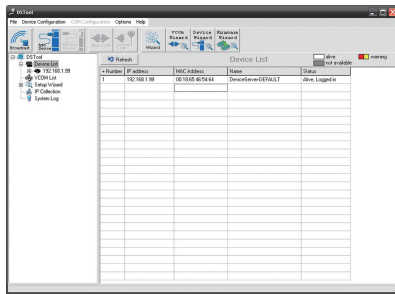
Wireless Client Mode

SSL Data Encryption



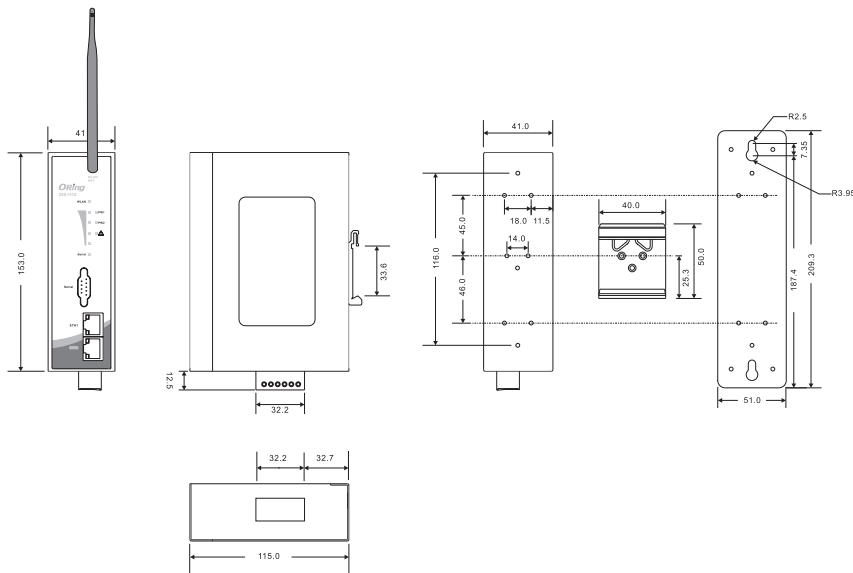
PPPoE and DDNS

TCP Client / Server Modes



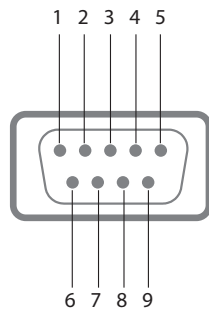
DS-Tool (Windows Utility) : Monitoring and Configuration interface

## Dimensions



Unit=mm

## Pin Definitions



DB9(male) connector

Pin #	RS-232
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI
RS-232 mode act as DTE	

## Specifications

ORing Device Server Model	IDS-1112
<b>Physical Ports</b>	
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	1
<b>WLAN Feature</b>	
WLAN Standard	IEEE802.11b/g
Operating Mode	Client mode
Antenna and Connector	Reverse SMA
Radio Frequency Type	DSSS, OFDM
Modulation	IEEE802.11b : CCK, DQPSK, DBPSK IEEE802.11g : OFDM with BPSK, QPSK, 16QAM, 64QAM
Frequency	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 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) WAP-PSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption
<b>Serial Ports</b>	
Connector	DB9(male) x 1
Operation Mode	RS-232
Serial Baud Rate	110 bps to 230.4 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
Flow Control	XON/XOFF, RTS/CTS, DTR/DSR
<b>Network Features</b>	
Protocol	ICMP, IP, TCP, UDP, DHCP, BOOTP, SSH, DNS, SNMP V1/V2c, HTTPS, SMTP, DDNS, PPPoE
<b>LED Indicators</b>	

Power Indicator	PWR 1(2) / Ready : Red On: Power is on and booting up. 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	Green for WLAN Link /ACTWLAN Link /ACT: Green: 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
<b>Power</b>	
Redundant Input Power	Dual DC inputs. 12-48VDC on 3-pin terminal block and power jack
Power Consumption (Typ.)	5.3 watts
Overload Current Protection	Present
Reverse Polarity Protection	Present on terminal block
<b>Physical Characteristics</b>	
Enclosure	IP-40
Dimensions (W x D x H)	40 (W)x 115 (D)x153 (H) mm (1.61 x4.52x6.06 inch.)
Weight (g)	551 g
<b>Environmental</b>	
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
<b>Regulatory Approvals</b>	
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

### Ordering Information

IDS-**A****B****C****D**

Code Definition	WLAN Identification	Serial Port Type	Serial Port Number	Ethernet Port Number
<b>Option</b>	- <b>1</b> : IEEE802.11 b/g mode	- <b>1</b> : RS-232 only	- <b>1</b> : 1 port	- <b>2</b> : 2 port

Available Model	Model Name	Description
	IDS-1112	Industrial 1-port secure serial to IEEE 802.11 b/g wireless device server with 1xRS-232 and 1x10/100Base-T(X)
<b>Packing List</b>		<b>Optional Accessories (Can be purchased separately)</b>
<ul style="list-style-type: none"> <li>IDS-1112</li> <li>DIN-Rail Kit</li> <li>Wall-mount Kit</li> <li>2dBi Antenna</li> <li>ORing Tool CD</li> <li>Quick Installation Guide</li> </ul>		<ul style="list-style-type: none"> <li>DR-45 series, 45W DIN-Rail power supply</li> <li>DR-75 series, 75W DIN-Rail power supply</li> <li>DR-120 series, 120W DIN-Rail power supply</li> <li>PAA-121000, 12VDC/1000mA 12W Power Adapter, US plug</li> <li>SDR-480-48, 480W DIN-Rail power supply</li> <li>PAE-121000, 12VDC/1000mA 12W Power Adapter, EU plug</li> <li>PAE-121000, 12VDC/1000mA 12W Power Adapter, EU plug</li> <li>RF-Antenna Base</li> <li>RF-Cable</li> <li>RF Surge Protector Series</li> </ul>