Industrial Device Serve

IDS-5642-WG

Industrial security 4-port RS232/422/485 to 802.11 b/g WLAN and 2-port 10/100TX Device

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
- 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-5642-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 bits

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
- 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

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- 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)
- 2KV isolation for RS422/485 serial port of IDS-5642-IWG
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- · DIN-Rail and panel mounting enabled

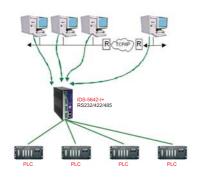
Introduction

IDS-5642-WG is an innovative security 4 ports RS232/422/485 to 802.11b/g WLAN and 2 ports LAN device server and IDS-5642-IWG with 4 ports isolated RS422/485. Users are able to configure the device server 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-5642-WG / IDS-5642-IWG offers many powerful

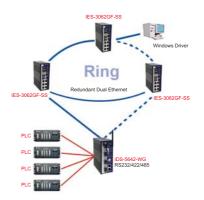
features for HW & SW redundant functions. When the connection between master-link and LAN fails, IDS-5642-WG/IDS-5642-IWG can automatically switch to another LAN port within 10mS, and still guarantees a non-stop connection. IDS-5642-WG/IDS-5642-IWG also supports switch mode; users can use Daisy Chain to reduce the usage of Ethernet switch ports. Secondly, IDS-5642-WG/IDS-5642-IWG can simultaneously transfer SSL encryption 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-5642-WG /IDS-5642-IWG provides dual redundant power inputs on terminal block. IDS-5642-WG /IDS-5642-IWG also provides NAT pass through function so that users are able to manage IDS-5642-WG /IDS-5642-IWG inside or outside the NAT router. It is easy for different IP domain users to use IDS-5642-WG /IDS-5642-IWG. Therefore, IDS-5642-WG/IDS-5642-IWG is one of the best security 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.



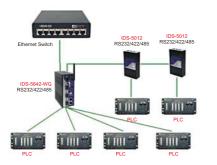
Redundancy 5 Host Devices



Dual Ethernet Redundancy mode



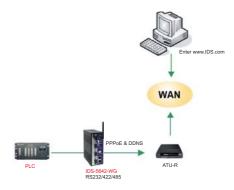
Wireless LAN Client Mode



Daisy Chain Switch mode



NAT Router Pass Through

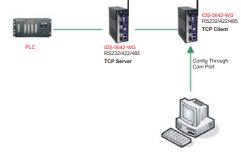


Connect through PPPoE / DDNS

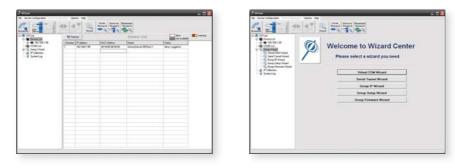
ORing 5



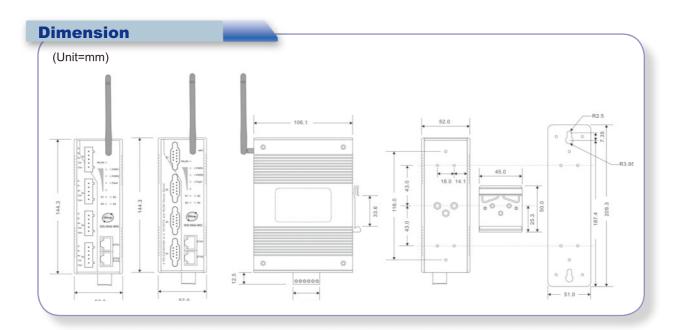
SSL Data Encryption



COM Port Command



Monitoring and Configuration interface



Specifications

ORing Device Server Model	IDS-5642-WG	IDS-5642-IWG		
Physical Ports				o
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX		2		L is
WLAN Feature				\mathcal{I}_{O}
Operating Mode	Client mode			
Antenna Connector	Reverse SMA			
Antenna Connector	Reverse SMA			
Radio Frequency Type	DSSS			_
Modulation	IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM			С С Ф
Frequency Band	America/FCC: 2.412~2.462 GHz (11 channels) Europe CE/ETSI: 2.412~2.472 GHz (13 channels)			<u>e</u>
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			Ψ
Receiver Sensitivity	-81dBm @ 11Mbps, PER< 8%; -64dBm @ 54Mbps, PER< 10%			<u>9</u>
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		Industrial Device Serve	
Serial Ports				σ
Connector	DB9 x 4	5 pin terminal block x 4		.ĭ
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		lst
Serial Baud Rate	110 bps to 460.8 Kbps			H
Data Bits	5, 6, 7, 8			Z
Parity	odd, even, none, mark, space			<u> </u>
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 DHG Green On: Power is on and functioning Norm Green Blinking: Located by Administrator.	CP or BOOTP server did not respond properly. nally.		
10/100TX RJ45 port indicator	Green for port Link/Act at 100Mbps. Yellow for port Link/Act at 10Mbps.			
WLAN indicator	WLAN 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			
Power				
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal	block, 12-45VDC on power jack		
Power consumption (Typ.)	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)x106(D)x144(H) mm (2.05x4.17x5.67 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

Code Definition	Serial Port Number	Ethernet Port Number	Serial Port WLAN Identification		
Option	- 4: 4 ports	- 2: 2 ports	- 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-5642-WG	Industrial security 4-port RS232/422/485 to 802.11 b/g WLAN and 2-port LAN Device Server
	IDS-5642-IWG	Industrial security 4-port isolated RS422/485 to 802.11 b/g WLAN and 2-port LAN Device Server