Industrial Device Server User's Manual

IDS-141A / IDS-181A



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Getting to Know Your Device Server

1.1 About the IDS-141A / IDS-181A Serial Device Server



IDS-141A / IDS-181A is an innovative 4 & 8 ports RS232 to LAN device server. Users are able to configure IDS-141A / IDS-181A by DS-Tool via LAN port. IDS-141A / IDS-181A offers many powerful features for HW & SW redundant functions.

IDS-141A / IDS-181A 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.

Secondly, the IDS-141A / IDS-181A provides dual redundant power inputs on terminal block. IDS-141A / IDS-181A also provides NAT pass through function so that users are able to manage IDS-141A / IDS-181A inside or outside the NAT router. It is easy for different IP domain users to use IDS-141A / IDS-181A. Therefore, IDS-141A / IDS-181A is the best communication redundant solution for current application of serial devices.

1.2 Software Features

- NAT-pass through: User can manage IDS-141A / IDS-181A through NAT router.
- Redundant Power Inputs: 12~48VDC on terminal block. & power jack
- Redundant multiple host devices: 5 simultaneous in Virtual COM, TCP Server, TCP Client mode, and 4 simultaneous for UDP mode.
- Secured Management by HTTPS and SSH.
- Versatile Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Event Warning by Syslog, Email, SNMP trap, Relay
- Various Windows O.S. supported: Windows NT/2000/ XP/ 2003/VISTA 32bits



1.3 Hardware Features

- Redundant Power Inputs: 12~48 VDC on terminal block and power jack
- Operating Temperature: -40 to 70°C
- Storage Temperature: -40 to 85 °C
- Operating Humidity: 5% to 95%, non-condensing
- Casing: IP-30
- One 10/100Base-T(X) Ethernet port
- Dimensions(W x D x H) : 26.1(W) x 94.9(D) x 144.3(H) mm



Hardware Installation

2.1 Install IDS-141A / IDS-181A on DIN-Rail

Each IDS-141A / IDS-181A has a Din-Rail kit on rear panel. The Din-Rail kit helps IDS-141A / IDS-181A to fix on the Din-Rail. It is easy to install the IDS-141A / IDS-181A on the Din-Rail:

2.1.1 Mount IDS-141A / IDS-181A on DIN-Rail

Step 1: Slant the IDS-141A / IDS-181A and mount the metal spring to Din-Rail.

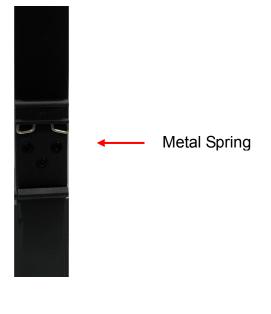


Figure 2-1



Step 2: Push the IDS-141A / IDS-181A toward the Din-Rail until you heard a "click" sound.



Figure 2-2

2.2 Wall Mounting Installation

Each IDS-141A / IDS-181A has another installation method for you. A wall mount panel can be found in the package. The following steps show how to mount the IDS-141A / IDS-181A on the wall:



2.2.1 Mount IDS-141A / IDS-181A on wall

Step 1: Remove Din-Rail kit.

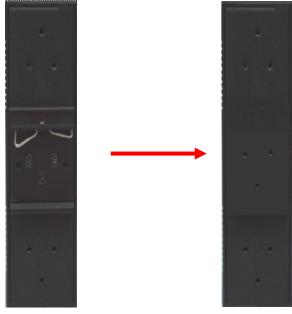


Figure 2-3



Step 2: Use 6 screws that can be found in the package to combine the wall mount panel. Just like the picture shows below:



Figure 2-4

The screws specification shows in the following two pictures. In order to prevent IDS-141A / IDS-181A from any damage, the size of screws should not be larger than the size that used in IDS-141A / IDS-181A.

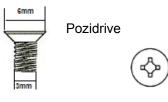


Figure 2-5



Hardware Overview

3.1 Front Panel

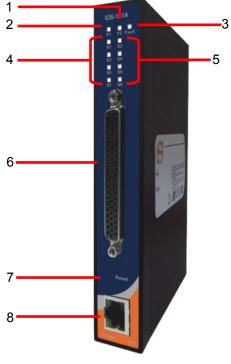


Figure 3-1

- 1. LED for PWR1 and system status. When the PWR1 links, the green LED will be light on.
- 2. LED for PWR2 and system status. When the PWR2 links, the green LED will be light on.
- 3. LED for fault indicator. When fault occurred, this red LED will be light on.
- LED for Serial ports status. When data transmitted, the green LED will be light on. (S5~S8 only available for IDS-181A)
- 5. LED for Serial ports status. When data transmitted, the green LED will be light on. (S5~S8



only available for IDS-181A)

- 6. DB62 Female port.
- 7. Reset button, press for 10 sec for factory default.
- 8. 10/100Base-T(X) Ethernet port

3.2 Front Panel LEDS

The following table describes the labels that stick on the IDS-141A / IDS-181A.

LED	Color	Status	Description
PWR1	Green	On	DC power 1 activated.
	Gleen	Blinking	System Booting / Located by administrator
DWDO	Green	On	DC power 2 activated.
PWR2	Gleen	Blinking	System Booting / Located by administrator
Fault	Amber	On	Fault event occurred.
S1 ~ S8	Green	Blinking	Serial port is transmitting/receiving
31~30	Green	Billikilig	data(S5~S8 only available for IDS-181A)
ЕТН	Green/Amber	Green/Amber On/Blinking	100Mbps LNK/ACT
	Green/Amber	Green On/Blinking	10Mbps LNK/ACT

Table 3-1 Front panel LEDs

3.3 Serial Ports

There 8 serial ports on the front panel of IDS-141A / IDS-181A shown as below:



	(
RXD1	2	
TXD1 /DSR1		/CTS1
/DTR1	<u>−(2) ≍ 44)</u> →	/RTS1
/DCD1 RXD2	-3 24 45	GND
/DSR2	<u>4</u>	/CTS2
/DTR2 /DCD2		/RTS2
RXD3 —	27) ~	
TXD3 /DSR3		/CTS3
/DTR3 /DCD3		/RTS3
RXD4		GND
/DSR4	−(9) ≍ 51)-	/CTS4
/DTR4 /DCD4		/RTS4
RXD5		GND /CTS5
	33)	TXD5
/DSR5	-12 <u>54</u>	/RTS5 /DTR5
/DCD5		GND RXD6
TXD6		/CTS6 //DSR6
/DTR6	⊢1 5) ∑ 57)+	/RTS6
RXD7		/DCD6 GND
/DSR7	-17) 58 59	TXD7 /CTS7
		/DTR7
/DCD7		/RTS7 GND
RXD8		/CTS8 TXD8
/DSR8	-20 62-	/RTS8 /DTR8
/DCD8	–શા 🐑 🗍	

Pin #	RS 232	Pin #	RS 232
1	TXD1	32	GND
2	DTR1	33	TXD5
3	RXD2	34	DTR5
4	DSR2	35	RXD6
5	DCD2	36	DSR6
6	TXD3	37	DCD6
7	DTR3	38	Txd7
8	RXD4	39	DTR7
9	DSR4	40	GND
10	DCD4	41	TXD8
11	RXD5	42	DTR8
12	DSR5	43	CTS1
13	DCD5	44	RTS1
14	TXD6	45	GND
15	DTR6	46	CTS2
16	RXD7	47	RTS2
17	DSR7	48	CTS3
18	DCD7	49	RTS3
19	RXD8	50	GND
20	DSR8	51	CTS4
21	DCD8	52	RTS4
22	RXD1	53	CTS5
23	DSR1	54	RTS5
24	DCD1	55	GND
25	TXD2	56	CTS6
26	DTR2	57	RTS6
27	RXD3	58	GND
28	DSR3	59	CTS7
29	DCD3	60	RTS7
30	TXD4	61	CTS8
31	DTR4	62	RTS8

(S5~S8 only available for IDS-181A)

Table 3-2 Pin assignment



3.4 Bottom Panel

The bottom panel components of IUSB-9041 are shown as below:

- 1. Terminal block includes: PWR1 (12~48V DC).
- 2. Relay output (1A@24VDC).
- 3. Terminal block includes: PWR2 (12~48V DC).
- 4. Power Jack include: PWR2 (12 ~ 48V DC).
- 5. Frame ground.

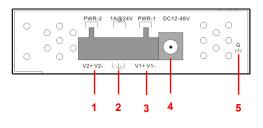


Figure 3-2



Cables

4.1 Ethernet Cables

The IDS-141A / IDS-181A has standard Ethernet ports. According to the link type, the IDS-141A / IDS-181A use CAT 3, 4, 5,5e UTP cables to connect to any other network device (PCs, servers, switches, routers, or hubs). Please refer to the following table for cable specifications.

Cable	Туре	Max. Length	Connector
10BASE-T	Cat. 3, 4, 5 100-ohm	UTP 100 m (328 ft)	RJ-45
100BASE-TX	Cat. 5 100-ohm UTP	UTP 100 m (328 ft)	RJ-45

Table 4-1 Cable Types and Specifications

100BASE-TX/10BASE-T Pin Assignments

With 100BASE-TX/10BASE-T cable, pins 1 and 2 are used for transmitting data, and pins 3 and 6 are used for receiving data.



Pin Number	Assignment
1	TD+
2	TD-
3	RD+
4	Not used
5	Not used
6	RD-
7	Not used
8	Not used

Table 4-2 RJ-45 Pin Assignments

The IDS-141A / IDS-181A supports auto MDI/MDI-X operation. You can use a straightthrough cable to connect PC to IDS-141A / IDS-181A. The following table below shows the 10BASE-T/ 100BASE-TX MDI and MDI-X port pin outs.

Pin Number	MDI port	MDI-X port		
1	TD+(transmit)	RD+(receive)		
2	TD-(transmit)	RD-(receive)		
3	RD+(receive)	TD+(transmit)		
4	Not used	Not used		
5	Not used	Not used		
6	RD-(receive)	TD-(transmit)		
7	Not used	Not used		
8	Not used	Not used		

Table 4-2 MDI / MDI-X pins assignment

Note: "+" and "-" signs represent the polarity of the wires that make up each wire pair.



Management Interface

5.1 DS-Tool

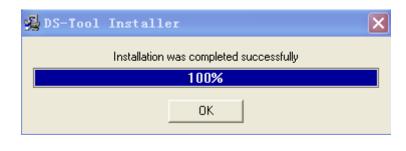
DS-Tool is a powerful Windows utility for DS series. It supports device discovery, device configuration, group setup, group firmware update, monitoring functions...etc. It is easy for you to install and configure devices over the network.

5.1.1 Install IDS-Tool

Step 1: Execute the Setup program, click "start" after selecting the folder for DS-Tool.

월 DS-Tool Insta	ller			X
ORing	Destination Directory C:\Program Files\DS-Tool Required: 7543 K Available: 210228 K		<u>B</u> rowse	
		Start	<u>E</u> xit	

Figure 5-1



Step 2: When installation complete successfully, then click "OK".

Figure 5-2

Step 3: Check for your selection.



Figure 5-3



5.1.2 Using DS-Tool

5.1.2.1 Explore device servers

DS-Tool will broadcast to the network and search all available DS devices in the network. The default IP address of device is "**192.168.10.2**", and selects the searching device you wish to use and press "**Add**" button.

You can set static IP address or in DHCP client mode to get IP address automatically. Finally, click "**OK** "button to add the device.

🔁 DS-Tool							
File Device Configuration COM Configuration Options Help							
Device List	P COM Broadcast Searching P F New Devices + Numb ▼ 192.168.10.2_00:AA:8B:CC:DD	MAC 00:AA:BB:CC:DD:77 Original IP 192.168.10.2					
E - Setup Wizard IP Collection System Log		✓ Using Static IP Using DHCP Assign Static IP IP IP Address 192.168.10.2 Netmask 255.255.255.0 Gatway 192.168.10.2 DNS1 DNS2 Auto Scan Im Password Im Cancel OK					
	Cancel Clear All	Select All Add					
		to be re-config? Click here ce. Group IP Wizard.					

Figure 5-4



5.1.2.2 Configure device servers

General settings

This page includes the setting of device name, SNTP server and Auto IP Report.

General Security Networking DDNS N	otification Management Upgrade Firmwa	re Save/Load
	CAddress Version 3:21:31:31 1.00b	Power
Device Name/Location DeviceServer-DEFAULT	Auto IP Report	
SNTP Server IP Port pool ntp. org 123 Time Zone (GMT+08:00)Taipei	IP Address Port 192.168.10.248 60001 Get Current Host Report Interval 10 Seconds	
🍫 Refresh		🕹 Apply Only 🗼 Apply and Save

Figure 5-5 General settings

The following	table	describes	the	labels	in	this	screen.
---------------	-------	-----------	-----	--------	----	------	---------

Label	Description
Device Name/location	You can set the device name or related information. By clicking "Locate On" button you can locate the serial server's position.
Set SNTP	Input the SNTP server domain name or IP address, port and select the Time zone.



Security

Set Auto IP Report	By Clicking the "Get current Host" button you will get your local IP, and then set the
Set Auto IP Report	Report interval time. The device server will report its status periodically.

Table 5-1 General settings

At IP collection option show the device server status. The report interval is 0 indicate disable this setting (default). But you can set the other IP or Port.

	-								
		working	DDNS	Notificat	ion	Management		Save/Load	
Access	IP Table						Password		
IP1 1	92.168.0.1	Mask	255.255.	255.255	~	Enabled	New Password		
IP2 1	92.168.0.2	Mask	255.255.	255.0	•	Enabled			
IP3		Mask			Γ	Enabled	Confirm New Passy	/ord	
IP4		Mask			Γ	Enabled	I Old Password		
IP5		Mask			Γ	Enabled			
IP6		Mask			Γ	Enabled			
IP7		Mask			Γ	Enabled	Change Passw	DIC	
IP8		Mask			Γ	Enabled			
IP9		Mask			Γ	Enabled			
IP10		Mask			Γ	Enabled			
IP11		Mask			Γ	Enabled			
IP12		Mask			Γ	Enabled			
IP13		Mask			Γ	Enabled			
IP14		Mask			Γ	Enabled			
IP15		Mask			Γ	Enabled			
IP16		Mask				Enabled			
					_				
🧐 Re	efresh						📃 🌛 Apply Only	/ 💊 Ap	ply and Save

Figure 5-6 Security

The following table describes the labels in this screen.

Label	Description	
Accessible IP Setting	To prevent unauthorized access by setting host IP addresses and network masks.	
Password setting	You can set the password to prevent unauthorized access from your server. Factory default is no password.	

Table 5-2 Security



Network Setting

Device DS can connect the Network by wire a. You must assign a valid IP address for DS before attached in your network environment. Your network administrator should provide you the IP address and related settings. The IP address must be unique within the network (otherwise, DS will not have a valid connection to the network). You can choose from three possible "**IP configuration**" modes: Static, DHCP/BOOTP. The Factory Default IP address is "**192.168.10.2**"

General Security Networking DDNS Notification Management Upgrade Firmware Save/Load Wire Vulsing Static IP Using DHCP/BOOTP Static IP Settings IP Address 192.168.10.2 Netmask 255.255.255.0 Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2 Sate Sateway 192.168.10.1 DNS2 Sateway Sateway Apply Only Apply Only					
Using Static IP Using DHCP/BOOTP Static IP Settings I92.168.10.2 Netmask 255.255.255.0 Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2	General Securi	ty Networking DDNS	Notification Management Up	grade Firmware Save/Lo	bad
Static IP Settings IP Address 192.168.10.2 Netmask 255.255.255.0 Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2	Wire				
IP Address 192.168.10.2 Netmask 255.255.255.0 Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2	🔽 Using Stati	c IP 🔲 Using DHCP/BC	DOTP		
Netmask 255.255.0 Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2	Static IP Settin	gs			
Gateway 192.168.10.1 DNS1 192.168.10.1 DNS2	IP Address	192.168.10.2	1		
DNS1 [192.168.10.1 DNS2	Netmask	255.255.255.0	1		
DNS2	Gateway	192.168.10.1	1		
	DNS1	192.168.10.1	1		
Sefresh Apply Only	DNS2				
S Refresh Apply Only					
S Refresh Apply Only					
🍫 Apply Only 🔒 Apply and Sa					
Sefresh Apply Only					
Sefresh Apply Only Apply and Sa					
	🍫 Refresh			🌛 Apply Only	land Save

Figure 5-7 Network Setting

The following table describes the labels in this scree	en.
--	-----

Label	Description
Using DHCP/BOOTP	IP Address automatically assigned by a DHCP server in your network.
Static IP Address	Manually assigning an IP address.
Subnet Mask	All devices on the network must have the same subnet mask to communicate on the



	network.
Gateway	Enter the IP address of the router in you network.
DNS Server	Enter the IP address of the DNS server, The DNS server translates domain names into
Divo Server	IP address.

Table 5-3 Network setting

PPPoE

PPPoE (Point-to-Point Protocol over Ethernet), Device can use PPPoE mode to connect the Network. Input the **"username**" and **"Password**", then click **"Connect**" button. If the device has been connected, the **"Link Status**" will become the "Link up" and device will get an IP address from PPPoE server. Click **"Disconnect**" button to disconnect the PPPoE connection.

Wire PPPoE	
□ PPPoE Setting	
User Name	
Password	
Link Status Link down	
Connect Disconnect	
S Refresh	🌏 Apply Only 📄 🌛 Apply and Save

Figure 5-8 PPPoE Setting



DDNS

The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname, allowing your computer to be more easily accessed from various locations on the Internet.

General Security Netw	orking DDNS Notification Management Upgrade Firmware Save/Load
DDNS Enable	
DDNS Setting	
Service Provider	ezip
Hostname	0
Account	0
Password	×
Check WAN IP Sched	tule Every Hour Start at (Hour): (Minute)
🍫 Refresh	🚴 Apply Only 🛛 🗼 Apply and Save

Figure 5-8 DDNS Setting



Label	Description
Service Provider	Choose the DDNS service Provider
Hostname	You must first apply an account from the DDNS service Provider such as www.dyndns.org,
	then register with the dynamic DNS service. Input the fixed hostname you got from the
	DDNS service.
Account mand	Input the Account and Password you have registered from the DDNS service Provider.
Password	
Check WAN IP	Device will shock the ID address Status at interval time you get
Schedule	Device will check the IP address Status at interval time you set.

Table 5-4 DDNS setting

Notification

Specify the events that should be notified to the administrator. The events can be alarmed by E-mail, SNMP trap, or system log.

General Security Networking DDNS Notification Management Up	grade Firmware Save/Load
🔽 SNMP Trap 🔽 Email Notification 🔽 Syslog Notification 🔽 Fa	ault LED/Relay
SNMP Settings I Statistics I Statistics Country I Statistics During the Statistics	
SNMP Settings Email Settings Syslog Setttings Fault LED/Relay Settin	igs
	'OE Fault
	th 1 Link Down
	th 2 Link Down
IP Changed DI_4 Changed Password Changed DO_1 Changed	
Access IP Blocked D0_2 Changed	
🔽 Redundant Power Changed 🔽 Power 1 Fault	
🔲 Redundant Ethernet Changed 🔲 Power 2 Fault	
Trap Server1	
Trap Server2	
Trap Server3	
Trap Server4	
9 Refresh	🚴 Apply Only 🛛 à Apply and Save

Figure 5-9 Notification



Label	Description
SNMP Trap	To notify events by SNMP trap.
Email Notification	To notify events by Email.
Syslog Notification	To notify events by Syslog.
Fault LED /Relay Settings	To notify events by Fault LED and relay
Notify items	Events to be notified.
Apply	Apply current setting.
Apply and Save	Apply and save current setting.

Table 5-3 Notification

Management

General Security Networking DDNS Notification Management Upgrade Firmware Save/Load

🔽 Web Manag	gement Enable	Goto Web Management	
🔽 Telnet Mana	agement Enable	Goto Telnet Management	
SNMP Man	agement Enable		
-SNMP Manage	ment Settings		
Community			
Location			
Contact			
Trap Server1			
Trap Server2			
Trap Server3			
Trap Server4			
🗐 Refresh			🜛 Apply Only

Figure 5-10 Management



Label	Description	
Web Management Enable	To enable management from Web. Click "Goto Web Management" button to	
	access web.	
Telnet Management Enable	To enable management by Telnet.	
SNMP Management Enable	To enable management by SNMP.	
SNMP Management Settings	To configure SNMP related settings.	

Table 5-4 Management

Upgrade Firmware

General Security Networking DDNS Notification Manag	ement Upgrade Firmware Save/Load
Firmware Image	
	Browsing Upgrade

Figure 5-11 Upgrade Firmware

The following table describes the labels in this screen.

Label	Description
Browsing	Browse the file and upgrade
Upgrade	Enable the firmware upgrade.

Table 5-5 Upgrade Firmware



Save/Load

General Security Networking DDNS Notification Management Upgrade Firmware	Save/Load
Save Configuration to Flash	
Load Default	
Coad Default	
Reboot Device	
Reboot Device	
Import/Export Configuration	
Import Export	

Figure 5-12 Save / Load

Label	Description
Save Configuration to	Save current configuration into flash memory.
Flash	Save current configuration into hash memory.
Load Default	Load default configuration except the network settings. If you want to load all factory
Load Delauit	default, you need to press "Reset" button on the device (Hardware restore).
Reboot Device	Reboot the device server (warm start).
Import Configuration	Restore the previous exported configuration.
Export Configuration	Exported current configuration to a file to backup the configuration.

The following table describes the labels in this screen.

Table 5-6 Save / Load



5.1.2.3 Configure serial port

Serial Settings

Serial Settings Service Mode Notification			
port1			
Port Alias Port0			
Baudrate 38400 Stop Bits 1 Performance Throughput			
Parity No Flow Control No Flow			
Data Bits 8 Interface RS232			
Delimiter Settings			
Serial to Ethernet Ethernet to Serial			
Delimiter 1 Delimiter 2 Delimiter 3 Delimiter 4 0 (HEX) Enabled Enabled Flush Serial to Ethernet Data Buffer After 0 (HEX) Enabled Flush Serial to Ethernet Data Buffer After 0 (0.65535) ms The received data will be queueing in the buffer until all the delimiters are matched. When the buffer is full (4K Bytes) or after "flush S2E data buffer" timeout, the data will also be sent. Ence TX interval time			
0 (0-65535)ms data 1 interval time data 2 interval time data 3 The received data will be queueing in TX buffer until TX interval time is timeout or TX buffer is full (4K Bytes), the data will also be sent. 0 is disable.			
Sefresh Apply Only Apply and Save			

Figure 5-13 Serial Settings

The following table describes the labels in this screen.

Label	Description
Port Alias	Remark the port to hint the connected device.
Interface	RS232
Baud rate	110bps/300bps/1200bps/2400bps/4800bps/9600bps/19200bps/
Bauurale	38400bps/57600bps/115200bps
Data Bits	5, 6, 7, 8
Stop Bits	1, 2 (1.5)
Parity	No, Even, Odd, Mark, Space
Flow Control	No, XON/XOFF, RTS/CTS, DTR/DSR



Performance	Throughput: This mode optimized for highest transmission speed.		
renomance	Latency: This mode optimized for shortest response time.		
	Delimiter:		
	You can define max. 4 delimiters (00~FF, Hex) for each way. The data will be		
	hold until the delimiters are received or the option-"Flush Serial to Ethernet data		
	buffer" times out. 0 means disable. Factory default is 0.		
Serial to Ethernet			
	Flush Data Buffer After:		
	The received data will be queuing in the buffer until all the delimiters are matched.		
	When the buffer is full (4K Bytes) or after "flush S2E data buffer" timeout the data will		
	also be sent. You can set the time from 0 to 65535 seconds.		
	Delimiter:		
	You can define max. 4 delimiters (00~FF, Hex) for each way. The data will be		
	hold until the delimiters are received or the option "Flush Ethernet to Serial data buffer" times out. 0 means disable. Factory default is 0.		
Ethernet to Serial			
	Flush Data Buffer After:		
	The received data will be queuing in the buffer until all the delimiters are matched. When the buffer is full (4K Bytes) or after " flushE2S data buffer "		
	timeout the data will also be sent. You can set the time from 0 to 65535 seconds.		



	Force TX interval time is to specify the timeout when no data has been transmitted.	
Force TX Interval Time	When the timeout is reached or TX buffer is full (4K Bytes), the queued data will be sent.	
	0 means disable. Factory default value is 0.	

Table 5-7 Serial settings

Service Mode – Virtual COM Mode

In Virtual COM Mode, The driver establishes a transparent connection between host and serial device by mapping the Port of the serial server serial port to local COM port on the host computer. Virtual COM Mode also supports up to 5 simultaneous connections, so that multiple hosts can send or receive data by the same serial device at the same time.

Serial Settings Service Mode Notification	
port1 Service Mode	
Virtual COM Mode	
Virtual COM Settings Data Port# 4004 Edit IP Port Number Idle Timeout	(0-65535) Seconds
Control Port# 4005 Alive Check 0	(0-65535) Seconds
Multilink	
Max Connections	Select a Virtual COM Name
5 🗸	VCOM1
Destination Host VCOM Name	(Validated charaters of virtual COM name is A-Z, a-z and 0-9. Max Length of the name is 128 charaters)
Waiting for VCOM connect 🖾 Goto VCom	Using Traditional COM Name
2 Waiting for VCOM connect Goto VCom	COM3 COM4 COM5 COM6
Waiting for VCOM connect	COM7 COM7 COM8 COM9
4 Waiting for VCOM connect Goto VCom	COM10 COM11
Waiting for VCOM connect Goto VCom	COM12 COM13
	Cancel OK

Figure 5-14 Virtual COM



Label	Description	
Map Virtual COM	Select a Virtual COM Name to map on.	
Max Connection	The number of Max connection can support simultaneous connections are 5, default	
	values is 1.	
Idle Timeout	When serial port stops data transmission for a defined period of time (Idle Timeout), the	
	connection will be closed and the port will be freed and try to connect with other hosts. 0	
	indicate disable this function. Factory default value is 0. If Multilink is configured, only	
	the first host connection is effective for this setting.	
	The serial device will send TCP alive-check package in each defined time interval (Alive	
Alive Check	Check) to remote host to check the TCP connection. If the TCP connection is not alive,	
	the connection will be closed and the port will be freed. 0 indicate disable this function.	
	Factory default is 0.	

Table 5-8 Virtual COM

*Not allowed to mapping Virtual COM from web

Service Mode – TCP Server Mode

In TCP Server Mode, DS is configured with a unique Port combination on a TCP/IP network. In this case, DS waits passively to be contacted by the device. After a connection is established, it can then proceed with data transmission. TCP Server mode also supports up to 5 simultaneous connections, so that multiple device can receive data from the same serial device at the same time.



erial Settings Service Mode Notification sort1 Service Mode TCP Server Mode	
ICP Server Mode	
TCP Server Settings Misc. Data Port 4002 Auto Scan Control Port 4003 Alive Check 0	
Multilink Max Connections 1 SRefresh Destination Host	
Disconnect	
2 Disconnect	
3 Disconnect	
4 Disconnect	
5 Discussed	
🧐 Refresh 🛛 🕹 Apply Only 🌏 🍌 Apply and Sar	ve

Figure 5-15 TCP Server mode

The following table describ	es the labels in this screen.
The following table accord	

Label	Description	
Data Port	Set the port number for data transmission.	
Auto Scan	Scan the data port automatically.	
Idle Timeout	When serial port stops data transmission for a defined period of time (Idle Timeout), the	
	connection will be closed and the port will be freed and try to connect with other hosts.	
	0 indicate disable this function. Factory default value is 0. If Multilink is configured,	
	only the first host connection is effective for this setting.	
Alive Check	The serial device will send TCP alive-check package in each defined time interval (Alive	
	Check) to remote host to check the TCP connection. If the TCP connection is not	
	alive, the connection will be closed and the port will be freed. 0 indicate disable this	
	function. Factory default is 0.	
Max Connection	The number of Max connection can support simultaneous connections are 5, default	
	values is 1.	

Table 5-9 TCP Server mode



Service Mode – TCP Client Mode

In TCP Client Mode, device can establish a TCP connection with server by the method you have settled (Startup or any character). After the data has been transferred, device can disconnect automatically from the server by using the TCP alive check time or Idle time settings.

Serial Settings Service Mode Notification	
port1 Service Mode TCP Client Mode 🗨	
TCP Client Mode	
TCP Client Settings Destination Host Port 192.168.0.10 4002 Image: Control Port 4003 Image: Control Port 4003	Misc. Idle Timeout 0 (0-65535) Seconds Alive Check 0 (0-65535) Seconds Connect on Startup
Destination Host Port	n
2 eq. Auto Sca	n
3 Auto Sca	n
4 eq. Auto Sca	n

Figure 5-16 TCP Client mode

The following table describes the labels in this screen.

Label	Description
Destination Host	Set the IP address of host.
Port	Set the port number of data port.



Idle Timeout	When serial port stops data transmission for a defined period of time (Idle
	Timeout), the connection will be closed and the port will be freed and try to
	connect with other hosts. 0 indicate disable this function. Factory default
	value is 0. If Multilink is configured, only the first host connection is effective
	for this setting.
Alive Check	The serial device will send TCP alive-check package in each defined time
	interval (Alive Check) to remote host to check the TCP connection. If the TCP
	connection is not alive, the connection will be closed and the port will be freed.
	0 indicate disable this function. Factory default is 0.
Connect on Startup	The TCP Client will build TCP connection once the connected serial device is
	started.
Connect on Any	The TCP Client will build TCP connection once the connected serial device
Character	starts to send data.

Table 5-10 TCP Client mode

Service Mode – UDP Mode

Compared to TCP communication, UDP is faster and more efficient. In UDP mode, you can Uni-cast or Multi-cast data from the serial device server to host computers, and the serial device can also receive data from one or multiple host



Serial Settings Service Mode Notification port1
Service Mode
UDP Mode
UDP Settings Listening Port 4004 Auto Scan
Multiink
Destination Host Begin Destination Host End Sending Port
192.168.0.1 to 192.168.0.100 10000 Auto Scan
to Auto Scan
Auto Scan
4 to Auto Scan

Figure 5-17 UDP mode

Notification

Specify the events that should be noticed. The events can be noticed by E-mail, SNMP trap or system log.



Serial Settings Service Mode No	tification		
SNMP Trap	Email Notification 🔽 Systo	gNotification	
SNMP Settings Email Settings S	Syslog Settings		
DCD Changed	CTS Changed		
DSR Changed	Port Connected		
	Port Disconnected		
Trap Server1			
Trap Server2			
Trap Server3			
Trap Server4			
S Refresh		🌛 Apply Only 🔒	Apply and Save
			-

Figure 5-18 Notification

The following table describes the labels in this screen.
--

Label	Description
DCD changed	When DCD (Data Carrier Detect) signal changes, it indicates that the modem
	connection status has changed. Notification will be sent.
DSR changed	When DSR (Data Set Ready) signal changes, it indicates that the data communication
	equipment is powered off. A Notification will be sent.
CTS shanged	When CTS (Clear To Send) signal changes, it indicates that the transmission between
CTS changed	computer and DCE can proceed. A notification will be sent.
	In TCP Server Mode, when the device accepts an incoming TCP connection, this event
Dort connected	will be trigger. In TCP Client Mode, when the device has connected to the remote host,
Port connected	this event will be trigger. In Virtual COM Mode, Virtual COM is ready to use. A
	notification will be sent.
	In TCP Server/Client Mode, when the device lost the TCP link, this event will be trigger.
Port disconnected	In Virtual COM Mode, When Virtual COM is not available, this event will be trigger. A
	notification will be sent.

Table 5-11 Notification



5.2 Configuration by Web Browser

5.2.1 CONNECT TO THE WEB PAGE

Step 2: Click "Yes" button on the dialog box.

Security	Aler	t 🔀		
£	by ot	rmation you exchange with this site cannot be viewed or changed others. However, there is a problem with the site's security lificate.		
	⚠	The security certificate was issued by a company you have not chosen to trust. View the certificate to determine whether you want to trust the certifying authority.		
	0	The security certificate date is valid.		
	⚠	The name on the security certificate is invalid or does not match the name of the site		
	Doy	ou want to proceed?		
		Yes <u>No</u> <u>V</u> iew Certificate		

Figure 5-19 Certificates

Step 1: Input the IP address of DS with "https://192.168.10.2" in the Address input box of IE.



Connect to 192.1	68. 10. 2
	GA
cgi-bin	
<u>U</u> ser name:	😰 admin 🛛 🔽
<u>P</u> assword:	•••••
	Remember my password
	OK Cancel

Step 3: Input the name and password, then click "OK".

Figure 5-20 Certificates

*Only if password is set.

Step 4: The system information will be shown as below.

Industrial Device Server				
open all Serial Device Server System Port Serial Setting Management Save/Reboot Help	System Information			
		IP Address	192.168.10.2]
		MAC Address	00:00:56:04:02:07	
		Firmware Version	1.00	

Figure 5-21 System information



5.2.1.1 System

Time (SNTP)

ORing Industrial Device Server					
open all Serial Device Server System Time(SNTP) P Configuration DDNS Configuration User Authentication P ort Serial Setting Management	SNT	^o Configuration		www.c	
		Name	DeviceServer-DEFAULT		
		Time			
Save/Reboot		SNTP	○ Enable ④ Disable		
		Time Zone	(GMT+08:00)Taipei		
		Local Time	Sat Dec 26 09:53:44 2009		
		Time Server	pool.ntp.org Port 123		
		Console			
		Telnet Console	⊙ Enable ○ Disable		
		Apply			

Figure 5-22 Time (SNTP)

Label	Description
Name	You can set the name of DS.
SNTP	Enable the SNTP server.
Time zone	After you set the SNTP enable, select the time zone you located.
Time server	Input SNTP server domain name or IP address and Port.
	Telnet Console (SSH) is included for security reasons. In some cases, you may need
Console	to disable this function to prevent unauthorized access from internet. The factory
	default is enable.

The following table describes the labels in this screen.

Table 5-12 Time (SNTP)



IP Configuration

You must assign a valid IP address for DS before attached in your network environment. Your network administrator should provide you with the IP address and related settings. The IP address must be unique and within the network (otherwise, DS will not have a valid connection to the network). You can choose from three possible "**IP configuration**" modes: Static, DHCP/BOOTP. The Factory Default IP address is "**192.168.10.2**"

Industrial Device Server					
open all ඔ Serial Device Server □	IP Co	IP Configuration			
DDNS Configuration		IP Configuration	Static		
Port Serial Setting Anagement Save/Reboot		IP Address	192.168.10.2		
 Save/Reboot Help 		Netmask	255.255.255.0		
		Gateway	192.168.10.1		
		DNS Server 1	192.168.10.1		
		DNS Server 2			
		Auto IP Report			
		Auto Report to IP			
		Auto Report to TCP Port	0		
		Auto Report Interval	0 seconds		
		Apply			

Figure 5-23 IP configuration



Label	Description
DHCP/BOOTP	Obtain the IP address automatically from DHCP server.
Static IP Address	Assigning an IP address manually.
Subnet Mask	Set the subnet mask to communicate on the network.
Gateway	Enter the IP address of the router in you network.
DNS Server	Enter the IP address of the DNS server to translate domain names into IP address.
Auto IP Report	The device server will report its status periodically. At DS-Tool->IP collection option show the device server status. The report interval is 0 indicate disable this setting (default). But you can set the other IP or Port.

The following table describes the labels in this screen.

Table 5-13 IP configuration

PPPoE setting

PPPoE (Point-to-Point Protocol over Ethernet), Device can use PPPoE mode to connect the Network. Input the **"username**" and "Password", then click **"Connect"** button. If the device has been connected, the **"Status"** will become the **"Link up"** and device will get an IP address from PPPoE server. Click "Return" button, return the **"IP Configuration"** default page.



Industrial Device Server						
open all ເable Serial Device Server I System Communication SNTP) (Communication Server S	PPPoE Settin	g				
 DDNS Configuration User Authentication 	User Na	ne				
 ■ Port Serial Setting ■ Management ■ Save/Reboot 	Passwor	d				
E Help	Status	Link dow	'n			
	Connec	t Disconnect	Return			

Authentication

You can set the password to prevent unauthorized access from network. Input the "Old password" and "New password" to change the password. Factory default is no password.



Industrial Device Server				
open all	User Authentication			
	Old Password			
Port Serial Setting Management Save/Reboot	New Password			
E Saverkebour	Confirm New Password			
	Арріу			

Figure 5-24 Authentication

5.2.1.2 Port serial setting

Serial configuration

	dustria	I Device S	server	
open all	Seria	l Configuration		
 DDNS Configuration User Authentication 			Port1 V	
Port Serial Setting Serial Configuration		Port Alias	port1	
Port Profile		Interface	RS232 🗸	
🗉 🗋 Management		Baud Rate	38400 🗸	
Save/RebootHelp		Data Bits	8 🕶	
		Stop Bits	1 💌	
		Parity	None 💌	
		Flow Control	None 💌	
		Force TX Interval Time	0 ms	
		Performance	⊙ Throughput ○ Latency	
		Apply		

Figure 5-25 Serial configuration



Label	Description			
Port Alias	Remark the port to hint the connected device.			
Interface	RS232			
Baud rate	110bps/300bps/1200bps/2400bps/4800bps/9600bps/19200bps/ 38400bps/57600bps/115200bps			
Data Bits	5, 6, 7, 8			
Stop Bits	1, 2 (1.5)			
Parity	No, Even, Odd, Mark, Space			
Flow Control	No, XON/XOFF, RTS/CTS, DTR/DSR			
Force TX Interval Time	Force TX interval time is to specify the timeout when no data has been transmitted. When the timeout is reached or TX buffer is full (4K Bytes), the queued data will be sent. 0 means disable. Factory default value is 0.			
Performance	Throughput: This mode optimized for highest transmission speed. Latency: This mode optimized for shortest response time.			
Apply	Activate settings on this page.			

The following table describes the labels in this screen.

Table 5-14 Serial configuration



Port Profile

	lustria	Il Device S	Server	
open all S Serial Device Server System Time(SNTP) S IP Configuration	Port I	Profile		
 DDNS Configuration User Authentication 			Port1 V	
Port Serial Setting Serial Configuration		Local TCP Port	4000	
Port Profile		Command Port	4001	
🗉 🗋 Management		Mode	Serial to Ethernet	
📓 Save/Reboot 🗃 Help		Flush Data Buffer After	0 ms	
		Delimiter(Hex 0~ff)	1: 2: 3: 4:	
		Mode	Ethernet to Serial	
		Flush Data Buffer After	0 ms	
		Delimiter(Hex 0~ff)	1: 2: 3: 4:	
		Apply		

Figure 5-26 Port Profile

The following table describes the labels in this screen.

Label	Description			
	Flush Data Buffer After:			
	The received data will be queued in the buffer until all the delimiters are matched.			
	When the buffer is full (4K Bytes) or after "flush S2E data buffer" timeout, the data will			
	also be sent. You can set the time from 0 to 65535 seconds.			
Serial to Ethernet				
	Delimiter:			
	You can define max. 4 delimiters (00~FF, Hex) for each way. The data will be hold until			
	the delimiters are received or the option "Flush Serial to Ethernet data buffer" times			
	out. 0 means disable. Factory default is 0			
	Flush Data Buffer After:			
Ethernet to seriel	The received data will be queued in the buffer until all the delimiters are matched.			
Ethernet to serial	When the buffer is full (4K Bytes) or after "flush E2S data buffer" timeout, the data will			
also be sent. You can set the time from 0 to 65535 seconds.				



Delimiter:
You can define max. 4 delimiters (00~FF, Hex) for each way. The data will be hold until
the delimiters are received or the option "Flush Ethernet to Serial data buffer" times
out. 0 means disable. Factory default is 0

Table 5-15 Port Profile

Service Mode – Virtual COM Mode

In Virtual COM Mode, the driver establishes a transparent connection between host and serial device by mapping the Port of the serial server serial port to local COM port on the host computer. Virtual COM Mode also supports up to 5 simultaneous connections, so that multiple hosts can send or receive data by the same serial device at the same time.

Industrial Device Server				
open all Serial Device Server System System () Time(SNTP) () P Configuration	Serv	ice Mode		www.orin
 DDNS Configuration User Authentication 			Port1 💌	
 Port Serial Setting Serial Configuration 		Data Encryption	○ Enable ④ Disable	
 Port Profile Service Mode Management Save/Reboot Help 		Service Mode	Virtual COM Mode 👻	
		Idle Timeout	0 (0~65535)seconds	
		Alive Check	0 (0~65535)seconds	
		Max Connection	1 max. connection (1~5)	
		Apply		

Figure 5-27 Virtual COM mode

Label	Description	
Idle Timeout	When serial port stops data transmission for a defined period of time (Idle Timeout), the	

The following table describes the labels in this screen.



	connection will be closed and the port will be freed and try to connect with other hosts.		
	0 indicate disable this function. Factory default value is 0. If Multilink is configured,		
	only the first host connection is effective for this setting.		
	The serial device will send TCP alive-check package in each defined time interval (Alive		
Alive Check	Check) to remote host to check the TCP connection. If the TCP connection is not		
	alive, the connection will be closed and the port will be freed. 0 indicate disable this		
	function. Factory default is 0.		
Max Connection	The number of Max connection can support simultaneous connections are 5, default		
	values is 1.		

Table 5-16 Virtual COM mode

*Not allowed to mapping Virtual COM from web

Service Mode – TCP Server Mode

In TCP Server Mode, DS is configured with a unique Port combination on a TCP/IP network. In this case, DS waits passively to be contacted by the device. After the device establishes a connection with the serial device, it can then proceed with data transmission. TCP Server mode also supports up to 5 simultaneous connections, so that multiple device can receive data from the same serial device at the same time.



open all Serial Device Server System Time(SNTP) (■) IP Configuration	dustrial Device Server				
 DDNS Configuration User Authentication 			Port1 v		
 Port Serial Setting Serial Configuration Port Profile Service Mode Management Save/Reboot Help 		Data Encryption	⊖ Enable ④ Disable		
		Service Mode	TCP Server Mode 💌		
		TCP Server Port	4000		
		Idle Timeout	0 (0~65535)seconds		
		Alive Check	0 (0~65535)seconds		
		Max Connection	1 v max. connection(1~5)		
		Apply			

Figure 5-28 TCP Server Mode

Label	Description			
TCP Server Port	Set the port number for data transmission.			
Idle Timeout	When serial port stops data transmission for a defined period of time (Idle Timeout), the connection will be closed and the port will be freed and try to connect with other hosts. 0 indicate disable this function. Factory default value is 0. If Multilink is configured, only			
Alive Check	the first host connection is effective for this setting. The serial device will send TCP alive-check package in each defined time interval (Alive Check) to remote host to check the TCP connection. If the TCP connection is not alive, the connection will be closed and the port will be freed. 0 indicate disable this function. Factory default is 0.			
Max Connection	The number of Max connection can support simultaneous connections are 5, default values is 1.			

The following table describes the labels in this screen.

Table 5-17 TCP server mode



Service Mode – TCP Client Mode

In TCP Client Mode, device can establish a TCP connection with server by the method you set (Startup or any character). After the data has been transferred, device can disconnect automatically from the server by using the TCP alive check time or Idle timeout settings.

	ustrial Device S	Server
open all Serial Device Server ⇒ System Signature(SNTP) Signature(SNTP) Signature(SNTP)	Service Mode	нин
 DDNS Configuration User Authentication 		Port1 ¥
Port Serial Setting Serial Configuration	Data Encryption	○ Enable ④ Disable
 Port Profile Service Mode 	Service Mode	TCP Client Mode 💌
Management Save/Reboot	Destination Host	· · · · · · · · · · · · · · · · · · ·
Help	Idle Timeout	0 (0~65535)seconds
	Alive Check	0 (0~65535)seconds
	Connect on	Startup ○ Any Character
	Destination Host	Port
	1.	
	2.	
	3.	
	4.	
	Apply	

Figure 5-29 TCP client mode

The following table describes the labels in this screen.

Label	Description		
Destination Host	Set the IP address of host and the port number of data port.		
	When serial port stops data transmission for a defined period of time (Idle Timeout), the		
Idle Timeout	connection will be closed and the port will be freed and try to connect with other hosts. 0		
	indicate disable this function. Factory default value is 0. If Multilink is configured, only		



	the first host connection is effective for this setting.	
	The serial device will send TCP alive-check package in each defined time interval (Alive	
Alive Cheek	Check) to remote host to check the TCP connection. If the TCP connection is not alive,	
Alive Check	the connection will be closed and the port will be freed. 0 indicate disable this function.	
	Factory default is 0.	
Connect on Startup	The TCP Client will build TCP connection once the connected serial device is started.	
Connect on Any	The TCP Client will build TCP connection once the connected serial device starts to send	
Character	data.	

Table 5-18 TCP client mode

Service Mode – UDP Client Mode

Compared to TCP communication, UDP is faster and more efficient. In UDP mode, you can Uni-cast or Multi-cast data from the serial device server to host computers, and the serial device can also receive data from one or multiple host

Industrial Device Server					
open all	Servi	ice Mode		www.orii	
 IP Configuration DDNS Configuration User Authentication Port Serial Setting Serial Configuration Port Profile Service Mode Management Save/Reboot Help 		Service Mode Listen Port Host start IP	Port1 V UDP Mode V Host end IP	Send Port	
		1. 2. 3. 4.	0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0		

Figure 5-30 UDP client mode



5.2.1.3 Management

Access IP Control

Access IP Control Settings allow you to add or block the remote host IP addresses to prevent unauthorized access. If host's IP address is in the accessible IP table, then the host will be allowed to access the DS. You can choose one of the following cases by setting the parameter.

- Only one host with a special IP address can access the device server, "IP address /255.255.255.255" (e.g., "192.168.0.1/255.255.255.255").
- Hosts on a specific subnet can access the device server. "IP address/255.255.255.0" (e.g., "192.168.0.2/255.255.255.0")
- 3. Any host can access the device server. Disable this function by un-checking the "Enable IP Filter" checkbox

	lustria	l De	vice Se	erver		
open all Serial Device Server System Time(SNTP) IP Configuration EDNS Configuration	Acce	ss IP Cor	ntrol List			
User Authentication Other Serial Setting		Enable IP Filtering (Not check this option will allow any IP to have assessibility)				
Serial Configuration		No.	Activate the IP	IP Address	Netmask	
🗈 Service Mode		1				
Management Access IP Control		2				
 SMTP/SNMP Conf. System Event Conf. 		3				
 Save/Reboot Help 		4				
		5				
		6				
		7				
		8				
		9				
		10				
		11				
		12				
		13				
		14				
		15				
		16				
		Apply				

Figure 5-31 Access IP



SMTP/SNMP Conf

Email Server configuration includes the mail server's IP address or domain. If the authentication is required, specify your name and password. There are 4 Email addresses that you can specify to receive the notification.

SNMP Server configuration includes the SNMP Trap Server IP address, Community, Location and Contact. There are 4 SNMP addresses you can specify to receive the notification.

SysLog server configuration includes the server IP and server Port. This option need to use with DS-Tool.

	dustrial Devic	e Server
open all Serial Device Server System Time(SNTP) IP Configuration DDD Conference to a	SMTP/SNMP Configu	ration
DDNS Configuration User Authentication Serial Configuration Serial Configuration Serivice Mode Management Access IP Control Settry/SNUMP Conf.	E-mail Settings	
	SMTP Server	Port 0
	My server req	uires authentication
	User Name	
 SMTP/SNMP Conf. System Event Conf. Save/Reboot 	Password	
Help	E-mail Sender	
	E-mail Address 1	
	E-mail Address 2	
	E-mail Address 3	
	E-mail Address 4	
	SNMP Trap Serve	r
	SNMP Server 1	
	SNMP Server 2	
	SNMP Server 3	
	SNMP Server 4	

Figure 5-32 SMTP / SNMP conf



System Event Conf.

Specify the events that should be notified to the administrator. The events can be alarmed by E-mail, SNMP trap, or system log.

·						
en all Serial Device Server System Port Serial Setting Serial Configuration	Syst	em Event Configu	iration			
Port Profile		Device Event Notif	ication			
Management Access IP Control		Hardware Reset (0	Cold Start)	SMTP Mail	SNMP Trap	Syslog
SMTP/SNMP Conf.		Software Reset (V	Varm Start)	SMTP Mail	SNMP Trap	Syslog
System Event Conf. Save/Reboot		Login Failed		SMTP Mail	SNMP Trap	Syslog
🖹 Help		IP Address Changed		SMTP Mail	SNMP Trap	Syslog
		Password Changed		SMTP Mail	SNMP Trap	Syslog
		Access IP Blocked		SMTP Mail	SNMP Trap	Syslog
		Redundant Power Changed		SMTP Mail	SNMP Trap	Syslog
		Port Event Notification		Port1 💙		
		DCD Changed		SMTP Mail	SNMP Trap	Syslog
		DSR Changed		SMTP Mail	SNMP Trap	Syslog
		CTS Changed		🔲 SMTP Mail	SNMP Trap	Syslog
		Port Connected		SMTP Mail	SNMP Trap	Syslog
		Port Disconnected		SMTP Mail	SNMP Trap	Syslog
		Fault Event Notific	ation and Fa	ult LED/Relay		
		Power 1 Fault	SMTP M	ail SNMP Trap	Syslog	Fault LED/Relay
		Power 2 Fault	SMTP M	ail 🔲 SNMP Trap	Syslog	Fault LED/Relay

Figure 5-33 SMTP / SNMP conf

The following table describes the labels in this screen.

Label	Description		
Hardware Reset (Cold	This refers to starting the system from power off (contrast this with warm start). When		
Start)	performing a cold start, DS will automatically issue an Auto warning message by		
	sending E-mail, log information or an SNMP trap after booting.		



Software Reset (Warm	This refers to restart the computer without turning the power off. When performing a
Start)	warm start, DS will automatically send an E-mail, log information or SNMP trap after
, 	reboot.
Login Failed	When an unauthorized access from the Console or Web interface, a notification will be
	sent.
IP Address Changed	When IP address of device changed, a notification will be sent.
Password Changed	When password of device changed, a notification will be sent.
Access IP Blocked	When the host accesses the device with blocked IP addresses, a notification will be
	sent.
Redundant Power	When status of power changed, a notification will be sent.
Change	
Redundant Ethernet	When status of Ethernet port changed, a notification will be sent.
Change	
DCD changed	When DCD (Data Carrier Detect) signal changes, it indicates that the modem
	connection status has been changed. A Notification will be sent.
DSR changed	When DSR (Data Set Ready) signal changes, it indicates that the data communication
	equipment is powered off. A Notification will be sent.
CTS changed	When CTS (Clear To Send) signal changes, it indicates that the transmission between
	computer and DCE can proceed. A notification will be sent.
Port connected	In TCP Server Mode, when the device accepts an incoming TCP connection, this event
	will be trigger. In TCP Client Mode, when the device has connected to the remote host,
	this event will be trigger. In Virtual COM Mode, Virtual COM is ready to use. A
	notification will be sent.
Port disconnected	In TCP Server/Client Mode, when the device lost the TCP link, this event will be trigger.
	In Virtual COM Mode, When Virtual COM is not available, this event will be trigger. A
	notification will be sent.
Power 1 Fault	When Power 1 Fault, a notification will be sent and the Fault LED will be lighted.
Power 2 Fault	When Power 2 Fault, a notification will be sent and Fault LED will be lighted.



	Eth link down	When Eth link down, a notification will be sent and Fault LED will be lighted.
--	---------------	--

Table 5-19 System event conf

5.2.1.4 Save/Reboot



Figure 5-34 Save / Reboot



Label	Description		
Factory Default	Load default configuration except settings of Network. If you want load all factory default,		
Factory Delault	you should press " Reset " button about the five seconds on the device (Hardware restore).		
Restore	Destars the provisus experted configuration		
Configuration	Restore the previous exported configuration.		
Backup	Expert the ourrent configuration to a file		
Configuration	Export the current configuration to a file.		
Upgrade Firmware	Upgrade to a new firmware with specified file.		
Reboot Device	Reboot the device server (warm start).		

The following table describes the labels in this screen.

Table 5-20 Save / Reboot

5.3 Configuration by SSH Console

5.3.1 Connect to DS

You can use SSH Tool (e.g., PUTTY) to access SSH console of DS. The SSH console interface is shown below.

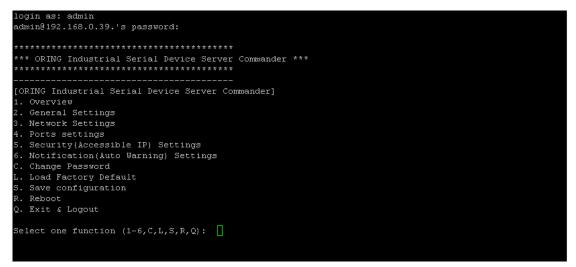


Figure 5-35 SSH



Technical Specifications

Network Interface	
	10/100Base-T(X) which support Redundant Dual Ethernet or
Ethernet	Switch Mode support. Auto-recover less than 10ms
connector	RJ-45
Protection	Built-in1.5KV magnetic isolation
Deste a la	ICMP, IP, TCP, UDP, DHCP, BOOTP, ARP/RARP, DNS, SNMP
Protocols	MIB II, HTTPS, SSH
Serial Interface	
laterfe	4x RS232 (IDS-141A)
Interface	8x RS232 (IDS-181A)
Connector	DB62 Female
Serial Baud Rate	110 bps to 115.2 Kbps
Data Bits	5, 6, 7, 8
Parity	odd, even, none, mark, space
Stop Bits	1. 1.5, 2
RS-232 signals	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
Flow control	XON/XOFF, RTS/CTS, DTR/DSR
Serial Line Protection	Built-in16KV ESD protection
	2KV DC isolation for each port
	PWR / Ready:
	1) Green On: DC power 1 activated.
LED Indicators	Green Blinking: System booting / Located by Administrator.
	ETH Link / ACT:
	Green ON/Blinking: 10 Mbps Ethernet
	Green & Amber ON/Blinking:100 Mbps Ethernet



	Serial TX / RX LEDS:
	Green: Serial port is transmitting / receiving data.
	Fault: Fault alarm (Amber)
Power Requirements	
Power Input	PWR1/2: 12~48VDC in 6-pin Terminal Block
Reverse Polarity Protection	Present at terminal block
Power Consumption	7 Watts MAX
Software Utility	
	DS-Tool for Windows NT/2000/XP/ 2003/VISTA which include
	Device discovery
	Auto IP report
	Device setting
Utility	Access control list
	Group setting
	Device monitoring
	Serial port monitoring
	Log info
	Group Firmware update
	Virtual Com / TCP Server / TCP Client / UDP /Serial Tunnel
	TCP Alive Check Timeout
Serial Mode	Inactivity Timeout
	Delimiter for Data Packing
	Force TX Timeout for Data Packing
Multiple Link	5 Hosts simultaneous connection: Virtual Com /
	TCP server / TCP Client / UDP
VCOM Driver	Windows NT/2000/XP/2003/VISTA
	Web HTTPS console, SSH console, Console Command
Configuration	DS-Tool for Windows
	NT/2000/XP/VISTA
Environmental	



Operating Temperature	-40~70°C (-40 to 158°F)
Operating Humidity	5% to 95%(Non-condensing)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Mechanical	
Dimensions(W x D x H)	26.1(W) x 94.9(D) x 144.3(H) mm
Casing	IP-30 protection
Regulatory Approvals	
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
EMI	FCC Part 15, CISPR (EN55022) class A
	EN61000-4-2 (ESD), EN61000-4-3 (RS)
	EN61000-4-4 (EFT)
EMS	EN61000-4-5 (Surge)
	EN61000-4-6 (CS)
	EN61000-4-8
	EN61000-4-11
Warranty	5 years