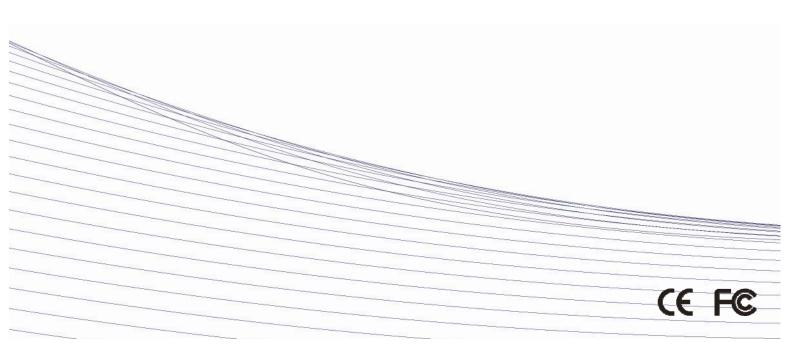


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# USER'S MANUAL

# Industrial Device Server IDS-3042 Wire Series

Ver. 1.0, Jan. 2008





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## **Getting to Know Your Device Server**

#### 1.1 About the IDS-3042 Serial Device Server



4-Port Series is an innovative 4 ports RS232/422 /485 to 2 ports LAN device server with optional isolation RS-422/485 serial ports and one P.O.E. PD Ethernet port. Users are able to configure IDS-3042 by IDS-Tools via LAN port. IDS-3042 offers many powerful features for HW & SW redundant functions. When the connection between master-link and LAN fails, the IDS-3042 can automatically switch to another LAN port within 10mS, and still guarantees a non-stop connection. IDS-3042 also supports switch mode, users can use Daisy Chain to reduce the usage of Ethernet switch ports. Secondly, the IDS-3042 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, the IDS-3042 provides dual redundant power inputs on terminal block. IDS-3042 also provides NAT pass through function so that users are able to manage IDS-3042 inside or outside the NAT router. It is easy for different IP domain users to use IDS-3042. Therefore, IDS-3042 is the best communication solution for wireless application of quad-port serial devices.

#### 1.2 Software Features

- Redundant Dual Ethernet Ports: Recovery time < 10ms</p>
- Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- NAT-pass through: User can manage IDS-3042 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, Relay and Beeper
- Various Windows O.S. supported: Windows NT/2000/ XP/ 2003/VISTA

#### 1.3 Hardware Features

- Redundant Power Inputs: 12~48 VDC on terminal block and power jack
- Operating Temperature: -10 to 60°C
- Storage Temperature: -20 to 85°C
- Operating Humidity: 5% to 95%, non-condensing
- Casing: IP-30
- 2 10/100Base-T(X) Ethernet port
- 1 optional P.O.E. PD port
- Dimensions(W x D x H) : 52 mm(W)x 106 mm( D )x 144 mm(H)





# **Hardware Installation**

#### 2.1 Install IDS-3042 on DIN-Rail

Each IDS-3042 has a Din-Rail kit on rear panel. The Din-Rail kit helps IDS-3042 to fix on the Din-Rail. It is easy to install the IDS-3042 on the Din-Rail:

#### 2.1.1 MOUNT IDS-3042 ON DIN-RAIL

Step 1: Slant the IDS-3042 and mount the metal spring to Din-Rail.



Step 2: Push the IDS-3042 toward the Din-Rail until you heard a "click" sound.



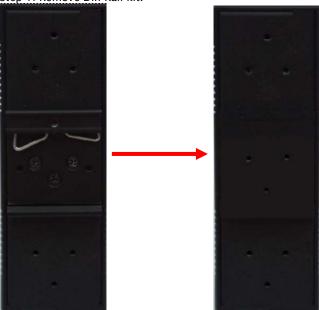


#### 2.2 Wall Mounting Installation

Each IDS-3042 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-3042 on the wall:

#### 2.2.1 MOUNT IDS-3042 ON WALL

Step 1: Remove Din-Rail kit.



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



The screws specification shows in the following two pictures. In order to prevent IDS-3042 from any damage, the size of screws should not be larger than the size that used in IDS-3042.



Step 3: Mount the combined IDS-3042 on the wall.

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## **Hardware Overview**

#### 3.1 Front Panel

#### **4-Port Wire Device Server Series**



- 1. LED for P.O.E. and system status. When the P.O.E. power connected, the green LED will be light on.. (IDS-3042P and IDS-2042P-I)
- LED for PWR1 and system status. When the PWR1 links, the green LED will be light on. LED for PWR2 and system status. When the PWR2 links, the green LED will be light on. 2.
- 3.
- 4. 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. When data received, the red LED 5. will be light on.
- 6. LED of 10Base-T connection on Ethernet port.
- LED of 100Base-TX connection on Ethernet port. 7.
- 10/100Base-T(X) Ethernet port. (P.O.E. PD port, IDS-3042P and IDS-2042P-I) 8.
- 10/100Base-T(X) Ethernet port. 9.
- 10. RS-422/485 serial port with 2KV isolation. Mode configured by IDS-Tools.
- 11. RS-232/422/485 serial port. Mode configured by IDS-Tools.

#### 3.2 Front Panel LEDs

The following table describes the labels that stick on the IDS-3042.

LED	Color	Status	Description
		On	Power supplied over Ethernet cable.
P.O.E.	Green/Red	Red blinking	Indicates an IP conflict, or DHCP or BOOTP server did not respond properly
		On	DC power 1 activated.
PWR 1	Green/Red	Red blinking	Indicates an IP conflict, or DHCP or BOOTP server did not respond



			properly
		On	DC power 2 activated.
	Green/Red		Indicates an IP conflict, or DHCP or
PWR2	dieen/ keu	Red blinking	BOOTP server did not respond
			properly
Fault	Red	On	Fault event occurred.
1~4	Green	Blinking	Serial port is transmitting data
1~4	Red	Blinking	Serial port is receiving data
ETH1	Green/Amber	Green On/Blinking	100Mbps LNK/ACT
EIHI		Amber On/Blinking	10Mbps LNK/ACT
	Green/Amber	Green On/Blinking	100Mbps LNK/ACT
ETH2	Green Amber	Amber On/Blinking	10Mbps LNK/ACT

#### 3.3 Serial Ports

There 4 serial ports on the front panel of IDS-3042 showed as below:

#### DB9 connector:

Pin As	ssignm	nent				
0						
Pin#	RS232	RS422	RS485(4 wire)	RS485(2 wire)		
1	DCD	RXD-	RXD-			
2	RXD	RXD+	RXD+			
3	TXD	TXD+	TXD+	DATA+		
4	DTR	TXD-	TXD-	DATA-		
5	GND	GND	GND	GND		
6	DSR					
7	RTS					
8	CTS					
9	RI					
RS23	32 mode	act as D	DTE			



5 pin Terminal block connector:

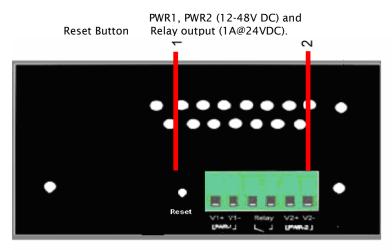
Pin Assignment



Pin#	RS422	RS485(4 wire)	RS485(2 wire)
1	GND	GND	GND
2	RXD-	RXD-	
3	RXD+	RXD+	
4	TXD-	TXD-	DATA-
5	TXD+	TXD+	DATA+

#### 3.4 Bottom Panel

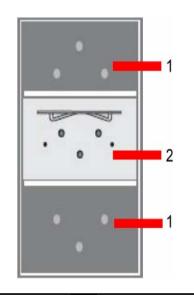
- The bottom panel components of 4-port series are showed as below: 1. Terminal block includes: PWR1, PWR2 (12 ~ 48V DC) and Relay output (1A@24VDC).
- 2. Reset bottom. 5 seconds for factory default.



#### 3.5 Rear Panel

The rear panel components of IDS-3042 are showed as below:

- 1. Screw holes for wall mount kit.
- 2. Din-Rail kit







# 4

# Cables

#### 4.1 Ethernet Cables

The IDS-3042 has standard Ethernet ports. According to the link type, the IDS-3042 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 Types and 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

#### 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.

**RJ-45** Pin Assignments

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

The IDS-3042 supports auto MDI/MDI-X operation. You can use a straight- through cable to connect PC to IDS-3042. The following table below shows the 10BASE-T/ 100BASE-TX MDI and MDI-X port pin outs.

MDI/MDI-X pins assignment

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

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





# **Management Interface**

#### 5.1 IDS-Tools

IDS-Tools is a powerful Windows utility for IDS 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-TOOLS

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

🛃 Installing IDS-Tools 👘		
SUNIX	Destination Directory	
	C:\Program Files\IDS-Tools	8
	Required: 5513 K Available: 6323792 K	<u>B</u> rowse
		Exit

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

nstalling IDS-Tools	
Installation was completed successfully	
100%	

Step 3: Check for your selection.



#### 5.1.2 USING IDS-TOOLS

#### 5.1.2.1 Explore IDS device servers

IDS-Tools will broadcast to the network and search all available IDS devices in the network. The default IP address of device is "**192.168.1.1**", 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.

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Broadcast	Broadcast Searchi	ng			e Firmware
DSTool ■ Devia COI ■ Setur IP Co Syste	New Devices  192.168.1.1_00:	25: 44: 56: 56: 45, Inv	valid IP.*	Original IP 192.1 Using Static IP Assign Static IP IP Address 192. Netmask 255. Gatway 192. DNS1 DNS2	D 🔽 Using DHCP
	Cancel	Clear All	Select All	Add	

#### 5.1.2.2 Configure IDS device servers

**General settings** This page includes the setting of device name, SNTP server and Auto IP Report. General Security Networking Notification Management Upgrade Firmware Save/Load

AN IP Address		AC Address	Version	
192.168.0.27	00:25	:44:56:56:45	1.1f	
				📒 Locate On
Device Name/Location				
DeviceServer-DEFAUL				
Using SNTP Time Server	r	Auto IP Repor	t	
SNTP Server IP	Port	IP Address	Port	
pool.ntp.org	123	192.168.0.2	60001	
Time Zone		Get O	urrent Host	
(GMT+08:00)Taipei	•	Report Interval		
		0	Seconds	



Label	Description					
Device	You can set the device name or related information. By clicking "Locate On" button you can locate the serial server's position.					
Name/location						
Set SNTP	Input the SNTP server domain name or IP address, port and select the Time zone.					
Set Auto IP Report	By Clicking the "Get current Host" button you will get your local IP, and then set					
	the Report interval time. The device server will report its status periodically.					

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.

Security

⊡	General Security Networking Notification Mana	agement Upgrade Firmware Save/Load
🖻 📲 Device List	Access IP Table	Password
⊡	IP1 192.168.0.1 Mask 255.255.255.255	Enabled New Password
Com List	IP2 192.168.0.2 Mask 255.255.255.0 I	Enabled
	IP3 Mask 0.0.0.0	Enabled Confirm New Password
📖 😺 System Log	IP4 Mask 0.0.0.0 J	Enabled Old Password
	IP5 Mask 0.0.0.0 J	Enabled
	IP6 Mask 0.0.0.0 J	Enabled
	IP7 Mask 0.0.0.0 J	Enabled Change Password
	IP8 Mask 0.0.0.0 J	Enabled
	IP9 Mask 0.0.0.0 J	Enabled
	IP10 Mask 0.0.0.0 J	Enabled
	IP11 Mask 0.0.0.0 J	Enabled
	IP12 Mask 0.0.0.0 J	Enabled
	IP13 Mask 0.0.0.0 J	Enabled
	IP14 Mask 0.0.0.0 J	🗖 Enabled
	IP15 Mask 0.0.0.0	Enabled
	IP16 Mask 0.0.0.0 J	Enabled
	S Refresh	👌 Apply Only 🛛 🗼 Apply and Save

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 "admin".

Network Setting						
⊡ 🗐 DSTool		neral Securi	ty Networking Notification	n Management Upg	grade Firmware   Save/Lo	ad
DSTool Device List Point COM List Point Point Setup Wiza Point Point System Log	3.0.27 Wi 11 IV rd Si 1	ire	: IP 🔲 Using DHCP/BOO		grade Firmware   Save/Lo	ad
		🤉 Refresh			🌛 Apply Only	re Apply and Save
The following table de	scribes the labe	els in thi	s screen.			
Label	Description					
Using DHCP/BOOTP	IP Address aut	tomatica	ally assigned by a	DHCP server	in your networl	k.
Static IP Address	Manually assig	gning ar	IP address.			
Subnet Mask	All devices on the network must have the same subnet mask to communicate on			nmunicate 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 IP address.

#### 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 Notification Management Upgrade Firmware Save/Load
SNMP Trap Email Notification 🔽 Syslog Notification
Syslog Setttings
Notified Items         Hardware Reset (Cold Start)       Redundant Power Changed         Software Reset (Warm Start)       Redundant Ethernet Changed         Login Failed       D1_1 Changed         IP Changed       D1_2 Changed         Password Changed       D1_3 Changed         Access IP Blocked       D1_4 Changed
System Log Settings       Server IP       192.168.0.2       514       Using Current Host's Log Server
192.168.0.2  514 Using Current Host's Log Server
🍤 Refresh 🛛 🕹 Apply Only 🌏 Apply and Save

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



anagement eneral Security	Networking   Notih	ication	Management	Upgrade	Firmware
🔽 Web Manag	jement Enable	Go	to Web Manage	ement	
🔽 Telnet Management Enable		Gote	o Telnet Manag	ement	
🔽 SNMP Mana	agement Enable				
-SNMP Manager	ment Settings				_
Community					
Location					
Contact					
Trap Server1					
Trap Server2					
Trap Server3					
Trap Server4					
	enerāl   Security Veb Manag Telnet Mana SNMP Manager Community Location Contact Trap Server1 Trap Server2 Trap Server3	enerāl   Security   Networking   Notif Web Management Enable Telnet Management Enable SNMP Management Settings Community Location Contact Trap Server1 Trap Server2 Trap Server3	enerāl   Security   Networking   Notification          Web Management Enable       Go         Telnet Management Enable       Got         SNMP Management Enable       SNMP Management Enable         SNMP Management Settings       Community         Location       Contact         Trap Server1       Trap Server2         Trap Server3       Contact	eneral   Security   Networking   Notification   Management Web Management Enable Goto Web Manage Telnet Management Enable Goto Telnet Manage SNMP Management Settings Community   Location   Contact   Trap Server1   Trap Server2   Trap Server3	eneral Security Networking Notification Management Upgrade  Web Management Enable Goto Web Management  Telnet Management Enable Goto Telnet Management  SNMP Management Enable  SNMP Management Settings Community Location Contact Trap Server1 Trap Server2 Trap Server3

The following table describes the labels in this screen.

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. Click "Goto Telnet Management" button to execute Telnet command.
SNMP Management Enable	To enable management by SNMP.
SNMP Management Settings	To configure SNMP related settings.

#### Upgrade Firmware

General	Security	Networking	Notification	Management	Upgrade Firmware	Save/Load	
Firmwa	are Image						
					Browsing	Upgrade	1

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



Save/Load ieneral   Security   Networking   Notification   Management   Upgrade Firmware   Save/Load
Save Configuration to Flash
Apply and Save
Load Default
Coad Default
Reboot Device
Reboot Device
Import/Export Configuration
Import Export

The following table describes the labels in this screen.

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

#### 5.1.2.3 Configure serial port

Serial Settings Serial Settings   Service Mode   Notification							
port1							
Port Alias	Port0				_		
Baudrate Parity	38400 -	Stop Bits Flow Control	1 No Flow	•	Performance	[hroughput	•
Data Bits		Interface	RS232	-			
· · · · · · · · · · · · · · · · · · ·	Delimiter Settings Serial to Ethernet   Ethernet to Serial						
Delimiter 1       Delimiter 2         (HEX)       (HEX)         Enabled       (HEX)         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.							
Force 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.							
🍤 Refr	esh			~	Apply Only	Apply a	nd Save

The following table describes the labels in this screen.LabelDescription



Port Alias	Remark the port to hint the connected device.		
Interface	RS232 / RS422 / RS485(2-wires) / RS485(4-wires)		
Baud rate	110bps/300bps/1200bps/2400bps/4800bps/9600bps/19200bps/		
	38400bps/57600bps/115200bps/230400bps/460800bps		
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.		
	Latency: This mode optimized for shortest response time.		
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:		
	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.		
Ethernet to Serial	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.		
	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		
	<b>buffer</b> " timeout the data will also be sent. You can set the time from 0 to		
	65535 seconds.		
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.		
Load Default	Remark the port to hint the connected device.		

#### 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

Service Mode Virtual COM Mode 🔽	
Virtual COM Mode	
Virtual COM Settings       Misc.         Data Port#       4004         Control Port#       4005	(0-65535) Seconds (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	Using Traditional COM Name
2 Waiting for VCOM connect Goto VCom	COM3 COM4 COM5 COM6
3     Waiting for VCOM connect	COM7 COM8 COM8
4 Waiting for VCOM connect Goto ∨Com	COM10 COM11 COM12
Waiting for VCOM connect Goto VCom	Соміз
	Cancel OK

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
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	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.

\*Not allowed to mapping Virtual COM from web

#### Service Mode - TCP Server Mode

In TCP Server Mode, IDS 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
Service Mode TCP Server Mode
CP Server Mode
TCP Server Settings     Misc.       Data Port     4002     Idle Timeout     0     (0-65535) Seconds       Control Port     4003     Auto Scan     Alive Check     0     (0-65535) Seconds
Multilink
Max Connections
1 S Refresh
Destination Host
Disconnect
2 Disconnect
3 Disconnect
4 Disconnect
5
🍫 Refresh 🛛 🕹 Apply Only

The following table describes the labels in this screen.

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.

#### 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.

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Serial Settings Service Mode Notification
Service Mode TCP Client Mode
TCP Client Mode
TCP Client Settings       Misc.         Destination Host       Port         192.168.0.10       4002         Image: Control Port       4003
Multilink
Destination Host Port
2 Auto Scan
Auto Scan
4 Auto Scan

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 Character	The TCP Client will build TCP connection once the connected serial device starts to send data.



#### 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

Serial Settings Service Mode   Notification	
port1	
Service Mode UDP Mode	
UDP Mode	
UDP Settings	
Listening Port	
4004 eQ. Auto Scan	
Multilink	
Destination Host Begin Destination Host End Sending Port	
1 192.168.0.1 to 192.168.0.100 10000 Auto Scan	
to Auto Scan	
3	
to Auto Scan	
4	
to Auto Scan	
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 Notification	
🔽 SNMP Trap 🖉 Email Notification 🔽 Syslog Notification	
SNMP Settings Email Settings Syslog Settings	
Notified Items	
T DCD Changed T CTS Changed	

# Notified items CTS Changed DSR Changed Port Connected RI Changed Port Disconnected Email to Mail Server: Mail to: Server: Wail to: Server: Mail to: Server:

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.	



RI changed	When RI (Ring Indicator) signal changes, it indicates that the incoming of a call. 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.

#### 5.2 Configuration by Web Browser

#### 5.2.1 CONNECT TO THE WEB PAGE

Step 1: Input the IP address of IDS with "https://192.168.1.1" in the Address input box of IE. Step 2: Click "Yes" button on the dialog box.

Security	Aler	t
£	by ot	nation you exchange with this site cannot be viewed or changed hers. However, there is a problem with the site's security icate.
	⚠	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 No Yiew Certificate

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

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

\*Only if password is set.

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



🖉 Industrial Serial Device Server - Windows In	nternet Explorer				
C - F https://192.168.1.1/		~	😵 Certificate Error	Google	P •
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp					
🙀 🎄 🌈 Industrial Serial Device Server				🔂 🔹 🔊 🖞	- 🖶 - 🕞 Page - 🍈 Tools - 🎽
				Copyright	© 2007 SUNIX Co., Ltd, all rights reserved
SUNIX		Industrial	Device	Sever	Go to Sunix • Help
Main Menu Industrial Serial Device Server	System Information				
System	IP Address	192.168.1.1			
System Information	MAC Address	00:18:54:65:46:66			
- IP Configuration	Firmware Version	1.00			
<ul> <li>Wireless Configuration</li> <li>User Authentication</li> <li>Port Serial Setting</li> <li>Management</li> <li>Save/Reboot</li> <li>Help</li> </ul>					
Done				😜 Intern	et 🔍 100% 👻 🛒

### 5.2.1.1 System

🖉 Industrial Serial Device Server - Windows In	ternet Explorer		
🚱 🕞 🔻 🙋 https://192.168.1.1/		👻 😵 Certificate Error 🤄 🗙 Google	<u>۹</u>
<u>File Edit Vi</u> ew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp			
😭 🏘 🌈 Industrial Serial Device Server		🛅 • 🗟 - 🖶 • 🖻	Page - 🎯 T <u>o</u> ols - 🎽
		Copyright © 2007 SUNIX	Co., Ltd, all rights reserved
sunix		Industrial Device Sever	JO.
Main Menu Industrial Serial Device Server	SNTP Configuration	n	Go to Sunix • Help
System System Information	Name	SUNIX SLAN	
SNTP	Time		
IP Configuration	SNTP	○ Enable ④ Disable	
Wireless Configuration User Authentication	Time Zone	(GMT+08:00)Taipei	=
Port Serial Setting	Local Time	Thu Jan 1 08:38:51 1970	
Management Save/Reboot	Time Server	pool.ntp.org Port 123	
Help	Console		
	Telnet Console	● Enable ○ Disable	
	Apply		·
		😜 Internet	🔍 100% 🔻 🛒

The following table describes the labels in this screen.

Label	Description
Name	You can set the name of IDS.
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.
Console	Telnet Console (SSH) is included for security reasons. In some cases, you may need to disable this function to prevent unauthorized access from internet. The factory default is enable.

#### **IP** Configuration

You must assign a valid IP address for IDS 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, IDS 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 "192.168.1.1"



TEL : +886-2-8913-1987 Email : info@sunix-ncci.com.tw

🖉 Industrial Serial Device Server - Windows Inte	rnet Explorer		
		💙 😵 Certificate Error 🐓 🗙 Google	<b>P</b> - <b>Q</b>
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp			
😭 🏟 🌈 Industrial Serial Device Server		🟠 - 🔝 - 🖶 - Ege - (	🍈 T <u>o</u> ols 🗸 🦈
sunix		Copyright © 2007 SUNIX Co., Ltd. a	all rights reserved
Main Menu Industrial Serial Device Server	IP Configuration	<u></u>	
System System Information	Network Interface	LAN	
SNTP	IP Configuration	Static	
<u>IP Configuration</u> Wireless Configuration	IP Address	192.168.1.1	
User Authentication	Netmask	255.255.255.0	
Port Serial Setting     Management	Gateway	192.168.1.254	
Save/Reboot Help	DNS Server 1		
neip	DNS Server 2		
	Auto IP Report		
	Auto Report to IP		
	Auto Report to TCP Port	0	
	Auto Report Interval	0 seconds	
	Apply		
		😜 Internet 🧃	100% 👻 🛒

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

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.		
Switch Mode	Redundant: When the connection between master-link and LAN fails, the IDS can automatically switch to another LAN port within10mS, and still guarantees a non-stop connection Switch: Daisy Chain support to reduce usage of switch ports.		

#### 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 "admin".

Old Password	•••	
New Password		
Confirm New Password		
Apply		

#### 5.2.1.2 Port serial setting



#### Serial configuration

Serial Configuration	
	Port1
Port Alias	PortO
Interface	RS232 💌
Baud Rate	38400 💌
Data Bits	8 🕶
Stop Bits	1 💌
Parity	None 💌
Flow Control	None 💌
Force TX Interval Time	0 ms
Performance	⊙ Throughput ○ Latency
Apply	

The following table describes the labels in this screen.

J	
Label	Description
Port Alias	Remark the port to hint the connected device.
Interface	RS232 / RS422 / RS485(2-wires) / RS485(4-wires)
Baud rate	110bps/300bps/1200bps/2400bps/4800bps/9600bps/19200bps/
	38400bps/57600bps/115200bps/230400bps/460800bps
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 gueued 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.

#### Port Profile

E.

	Port1
Local TCP Port	4000
Command Port	4001
Mode	Serial to Ethernet
Flush Data Buffer After	0 ms
Delimiter(Hex 0~ff)	1: 00 2: 00 3: 00 4: 00
Mode	Ethernet to Serial
Flush Data Buffer After	0 ms
Delimiter(Hex 0~ff)	1: 00 2: 00 3: 00 4: 00

Label	Description					
Serial to Ethernet	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.					
	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					
Ethernet to serial	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 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

#### 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.

#### Service Mode

	Port1
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

The following table describes the labels in this screen.

Label	Description
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.

\*Not allowed to mapping Virtual COM from web

#### Service Mode - TCP Server Mode

In TCP Server Mode, IDS is configured with a unique Port combination on a TCP/IP network. In this case, IDS 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.

Service Mode	
	Port1
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

Label	Description
TCP Server Port	Set the port number for data transmission.
ldle 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.				

#### 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.

#### Service Mode

	Port1
Service Mode	TCP Client Mode 💌
Destination Host	0.0.0.0 : 4000
Idle Timeout	0 (0~65535)seconds
Alive Check	0 (0~65535)seconds
Connect on	💿 Startup 🔘 Any Character
Destination Host	Port
1. 0.0.0.0	65535
2. 0.0.0.0	65535
3, 0.0.0.0	65535
4. 0.0.0.0	65535

Label	Description				
Destination Host	Set the IP address of host and 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 Character	The TCP Client will build TCP connection once the connected serial device starts to send data.				



#### 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

Service Mode	UDP Mode 🗸	
Listen Port	4004	
Host start IP	Host end IP	Send Port
1, 192.168.0.1	192.168.0.100	20000
2, 0.0.0.0	0.0.0.0	65535
3. 0.0.0.0	0.0.0.0	65535
4. 0.0.0.0	0.0.0.0	65535

#### 5.2.1.3 Management

#### Accessible IP Settings

Accessible IP 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 IDS. You can choose one of the following cases by setting the parameter.

- 1. 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").
- 2. 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 Access IP Control List

No.	Activate the IP IP Address		Netmask	
1				]
2				]
з				]
4				]
5				]
6				]
7				
8				
9				
10				
11				
12				]
13				]
14				]
15				]
16				

#### SMTP/SNMP Configuration

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 IDS-Tools. SMTP/SNMP Configuration

E-mail Settings						
SMTP Server	Port					
My server requires authentication						
User Name						
Password						
E-mail Sender						
E-mail Address 1						
E-mail Address 2						
E-mail Address 3						
E-mail Address 4						
SNMP Trap Server						
SNMP Server 1						
SNMP Server 2						
SNMP Server 3						
SNMP Server 4						
Community						
Location						
Contact						
Syslog Server						
Syslog Server IP						
Syslog Server Port	Π					



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

System Event Configuration					
Device Event Notification					
Hardware Reset (Cold Start)	SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
Software Reset (Warm Start)	SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
Login Failed	SMTP Mail	🔲 SNMP Trap	Syslog		
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		
Redundant Ethernet Changed	🔲 SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
SNMP Access Failed	SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
Port Event Notification					
DCD Changed	🔲 SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
DSR Changed	🔲 SMTP Mail	🔲 SNMP Trap	🔲 Syslog		
RI 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		

#### Apply

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).			
Start)	When performing a cold start, IDS 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			
Start)	performing a warm start, IDS will automatically send an E-mail, log information			
	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	When DCD (Date Coming Date at) signal sharpers, it is disated that the modern			
DCD changed	When DCD (Data Carrier Detect) signal changes, it indicates that the modem			
DSR changed	connection status has been changed. A Notification will be sent. When DSR (Data Set Ready) signal changes, it indicates that the data			
DSK changed	communication equipment is powered off. A Notification will be sent.			
RI changed	When RI (Ring Indicator) signal changes, it indicates an incoming call.			
Ki changeu	Notification will be sent.			
CTS changed	When CTS (Clear To Send) signal changes, it indicates that the transmission			
ers enangea	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.			

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#### 5.2.1.4 Save/Reboot

ictory Default set to default configuration. ick Reset button to reset all configurations to the default value. Reset	
estore Configuration	
bu can restore the previous saved configuration to Device Server.	
Restore	
ackup Configuration ou can save current EEPROM value from the Device Server as a backup file of configuration. Backup	
ograde Firmware	
pecify the firmware image to upgrade.	
ote: Please DO NOT power off this device while upgrading firmware.	
Upgrade	
eboot Device	
ease click [Reboot] button to restart device.	
Reboot	

The following table describes the labels in this screen.

Label	Description	
Load Factory Default	Load default configuration except settings of Network. If you want load all	
	factory default, you should press " <b>Reset</b> " button on the device (Hardware restore).	
Import	Restore the previous exported configuration.	
Configuration		
Export	Export the current configuration to a file.	
Configuration		
Upgrade Firmware	Upgrade to a new firmware with specified file.	
Reboot Device	Reboot the device server (warm start).	

#### 5.3 Configuration by SSH Console

#### 5.3.1 CONNECT TO IDS

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

🔗 192. 168. 10. 2	<b>- - ×</b>					
login as: admin	~					
admin@192.168.10.2's password:						
*******						
*** Port Commander ***						
*******						
Input System Password: ***						
Password comfirmed. Starting Main Menu.						
[Port Commander] 1. Overview						
2. General Settings						
2. General Settings 3. Network Settings						
4. Ports settings						
5. Security(Accessible IP) Settings						
6. Notification(Auto Warning) Settings						
C. Change Password						
L. Load Factory Default						
S. Save configuration						
R. Reboot						
Q. Exit & Logout						
Select one function (1-6,C,L,S,R,Q):	~					



6

# **Technical Specifications**

Network Interface	
Ethernet	2x 10/100Base-T(X) which support Redundant Dual Ethernet or
	Switch Mode support. Auto-recover less than 10ms
connector	RJ-45
Protection	Built-in1.5KV magnetic isolation
Protocols	ICMP, IP, TCP, UDP, DHCP, BOOTP, ARP/RARP, DNS, SNMP MIB II HTTPS, SSH
P.O.E.	P.O.E. present at ETH2 (IDS-3042-P/IDS-3042-IP Only)
	Power Device (IEEE 802.3af):
	IEEE 802.3af compliant input interface
	Power consumption: 8Watts max
	Over load & short circuit protection
	Isolation Voltage: 1000 VDC min.
	Isolation Resistance : 10 <sup>8</sup> ohms min
Serial Interface	
Interface	IDS-3042/IDS-3042P:
	4x RS232 / RS422 / 4(2)-Wire RS485. Which can be configured by
	IDS-Tools
	IDS-2042P-I:
	4x RS422 / 4(2)-Wire RS485. Which can be configured by
	IDS-Tools
	IDS-1042: 4x RS232. Which can beconfigured by IDS-Tools
Connector	IDS-3042/IDS-3042P/IDS-1042: Male DB9
Connector	
Serial Baud Rate	IDS-2042P-I: 5 pin terminal block 110 bps to 460.8 Kbps
Data Bits	5, 6, 7, 8
Parity Stop Bits	odd, even, none, mark, space
RS-232 signals	TxD, RxD, RTS, CTS, DTR, DSR, DCD, RI, GND
KS-232 Signals	(IDS-3042/IDS-3042-P)
RS-422 signals	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (4 wire) signals	Tx+,Tx-, Rx+, Rx-,GND
RS-485 (2 wire) signals	Data+, Data-,GND
Flow control	XON/XOFF, RTS/CTS, DTR/DSR
Serial Line Protection	Built-in15KV ESD protection 2KV DC isolation for each port (IDS-3042-IW only)
LED Indicators	PWR P.O.E.(1)(2) / Ready:
	1) Red On: Power is on and booting up.
	Red Blinking: Indicates an IP conflict, or DHCP or BOOTP server
	did not respond properly.
	2) Green On: Power is on and functioning normally.
	Green Blinking: Located by Administrator.
	ETH1(2) Link / ACT:
	Orange ON/Blinking: 10 Mbps Ethernet
	Green ON/Blinking:100 Mbps Ethernet
	Serial TX / RX LEDs:
	Red: Serial port is receiving data
	Green: Serial port is transmitting data.
	Fault: Fault alarm (Red)
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	
Utility	IDS-Tools for Windows NT/2000/XP/ 2003/VISTA which
-	include
	Device discovery
	Auto IP report
	Device setting (run-time change, no rebooting)
	Access control list
	Group setting
	Gloup setting



	Device monitoring
	Serial port monitoring
	Log info
	Group Firmware update
Serial Mode	Virtual Com / TCP Server / TCP Client / UDP /Serial Tunnel
	TCP Alive Check Timeout
	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
Configuration	Web HTTPS console, SSH console,
	IDS-Tools for Windows
	NT/2000/XP/VISTA
Environmental	
Operating Temperature	-10 to 60°C (14 to 140°F)
Operating Humidity	5% to 95%(Non-condensing)
Storage Temperature	-20 to 85°C (-4 to 185°F)
Mechanical	
Dimensions(W x D x H)	52mm(W)x106mm(D)x144mm(H)
Casing	IP-30 protection
Regulatory Approvals	
Shock	IEC60068-2-27
Free Fall	IEC 60068-2-32
Vibration	IEC 60068-2-6
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),
	Level 3, EN61000-4-6 (CS), Level 3
MBTF	200,000 hours at least
Warranty	5 years

#### 6.1. Contact Information

Customer satisfaction is our number one concern, and to ensure that customers receive the full benefit of our products, SUNIX services has been set up to provide technical support, driver updates, product information, and user's manual updates.

The following services are provided

E-mail for technical support	info@sunix.com.tw
World Wide Web (WWW) Site for product information:http	://www.sunix.com.tw