# Field Device Networking

A member of the growing family of rugged solutions from EtherWAN System, Inc., the SE5100 and SE5300 series addresses a demand for connecting serial interface based equipment to the user friendly Ethernet-based network in a rugged environment. All the serial interface based equipments can be easily accessed, monitored, managed, and controlled over Ethernet-based network. Besides, the SE5100 and SE5300 can be managed locally through their serial port or remotely through Telnet, SNMP, and Web Browser Management.

SE5100 is an one serial port to one Ethernet port industrial serial server and SE5300 is a two or four serial ports to two Ethernet ports industrial serial server, which is an easy and reliable solution for bridging your serial based equipments to the Fast Ethernet networks. The two ports Ethernet can be used to cascade two or more SE5300 devices, which eliminates the need to connect each serial server to an Ethernet switch. The serial ports support RS-232/422/485 or isolated RS-422/485, and the LAN ports support 10/100-TX or 100Base fiber optical.

SE5100 & SE5300 offer flexible power inputs including both Terminal Block and DC Jack with latch to secure higher stability against power input failure and safeguard against power outage. The other live power input will instantaneously take over the load and act as a backup to provide the power needs automatically without any loss if one of the power inputs fails. SE5100 and SE5300 also provide port buffering to prevent data loss in case network connection fails. SE5100 and SE5300 will queue all of the serial data in their internal 64K Bytes port buffer when the Ethernet connection fails. They will immediately send all of the data stored in the port buffer in the order that the data was received when the Ethernet is reconnected. And failure conditions and specific events discovered by SE5100 and SE5300 are reported to multiple user-defined destinations in the form of a SNMP trap and E-mail. Furthermore, with alarm notification capability, SE5300 provide relay contact output to warn the network administrator when the power fails or a port link is disconnected.



# Serial to Ethernet Solutions

TS900	 3-1
TS100	 3-3
SE5100	 3-5
SE5300	 3-7

# **Serial to Wireless Solutions**

W5400	2 0
N/\/5/1110	<b>≺</b> _u

# TS900 Series

# 1-port Hardened Serial Device Server





A member of the growing family of ruggedized solutions from EtherWAN Systems, the TS900 series addresses a demand for connecting serial interface based equipment to the user friendly Ethernet-based local area network. The TS900 connects serial interface based equipment to Fast Ethernet networks in a rugged environment for industrial and transportation applications.

## Managed Protocol Converter:

The TS900 series is a device that converts between the serial RS232/422/485 communications interfaces to Fast Ethernet interface. The TS900 is managed through its web-based Graphic User Interface (GUI). The IP addressable interface provides user friendly functions and menus for easy configuration.

## Cost Effective:

The TS900 is compatible with software solutions which create virtual Com ports on personal computers. This allows users to continue to use the original software for serial-port-based equipment. By eliminating the need to write new software, existing equipment can be connected to a TCP/IP Ethernet network with minimal implementation cost. The TS900 functions at temperatures ranging from  $-40^{\circ}$ C to  $75^{\circ}$ C ( $-40^{\circ}$ F to  $167^{\circ}$ F) and is tested for functional operation @  $-40^{\circ}$ C to  $85^{\circ}$ C ( $-40^{\circ}$ F to  $185^{\circ}$ F), the TS900 is the converter of choice for harsh environments and easy migration.

# Features

- ➤ Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- Provides one port 10/100Base-T/TX auto-negotiation/Auto MDIX with RJ45 connector, or one port Multi Mode with SC/ST/MT-RJ/VF-45/LC fiber connector, or Single Mode SC/ST fiber connector
- ➤ Provides one serial port 4 wire full-duplex asynchronous (RS-422/485) or 2 wire half-duplex asynchronous (RS-485)
- ➤ Provides 3-in-1 RS-232/422/485 serial interfaces
- Complies with IEEE802.3 10Base-T and IEEE 802.3u 100Base-TX, 100Base-FX standards
- ➤ Complies with EIA/TIA RS-232E, EIA/TIA-574
- Extended distances up to 1.2Km (0.74mile) (24AWG) using RS-422/485
- LED Indication: PWR, LINK/ACT, FDX, STATUS (ON idle, BLINK -Running)
- ► -40°C to 75°C (-40°F to 167°F) operating temperature range

# Ordering Information

# DC Jack power input: TS900RJ Hardened 1-port RS-232/422/485 to 10/100Base-TX Serial Device Server TS900C Hardened 1-port RS-232/422/485 to 100Base-FX Multi Mode (SC) Serial Device Server TS900T Hardened 1-port RS-232/422/485 to 100Base-FX Multi Mode (ST) Serial Device Server

# Terminal Block power input: TS930RJ Hardened 1-port RS-232/422/485 to 10/100Base-TX Serial Device Server TS930C Hardened 1-port RS-232/422/485 to 100Base-FX Multi Mode (SC) Serial Device Server TS930T Hardened 1-port RS-232/422/485 to 100Base-FX Multi Mode (ST) Serial Device Server

- \*TS901/TS931 DB25 version series are also available.
- \*ST fiber also available in Single Mode, 20Km.
- \*SC fiber also available in Single Mode, 20/40/75/100/120Km.
- \*SC fiber also available in WDM

# **Power Supply: (Optional)**

- \*Option A The Terminal Block type external power supply are not included. Please order the following part numbers, as required: 41-136046-X X=1,2,3,4,5
- \*\*Option B The external power adapter and power cord are not included. Please order the following part numbers, as required: 41-136044-X X=1,2,3,4,5
- \*See page 4-5 to 4-9 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)

# Technology

# Serial Port

- Interface: RS-232/422/485 (software selectable)
- Connector: DB9 for RS-232/422/485

# Serial Communication Parameters:

- Parity: None, Even, Odd
- Data Bits: 5, 6, 7, 8
- Stop Bit: 1, 2
- Flow Control: None, RTS/CTS, Xon/Xoff
- Speed: 600 bps to 230.4 Kbps

## **Ethernet Port:**

- Interface: 10/100Base-TX: 100Base-FX
- Connector: R-J45 (10/100Base-TX); SC,ST type (100Base-FX)

## Protocols:

TCP, IP, UDP, Telnet, DHCP, ICMP, HTTP

Virtual COM Port Mode, TCP Mode, UDP Mode

# OS Driver Support:

Windows 95/98/2000/XP

## Management

 Serial Console, Telnet Console, Web Management, Firmware Upgradeable

# Power

Input Voltage: 12VDC

# **Power Consumption:**

2.64W Max. 0.22A@12VDC

Terminal Block or DC Jack

# Mechanical

Aluminum case

• 80.3mm (W) x 109.2mm (D) x 23.8mm (H) (3.16" (W) x 4.3" (D) x 0.94" (H))

# Weight:

• 0.8kg (1.76 lb)

# nstallation:

DIN Rail, Wall Mounting

# **Environment**

# **Operating Temperature:**

 -40°C to 75°C (-40°F to 167°F) Tested @ -40°C to 85°C (-40°F to 185°F)

# Storage Temperature

-40°C to 85°C (-40°F to 185°F)

# **Ambient Relative Humidity**

5% to 95% non-condensing

# **Regulatory Approvals**

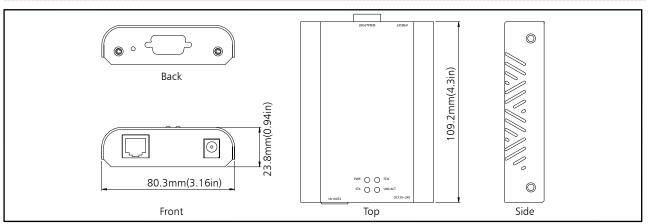
- Manufactured in an ISO9001 facility
- UL60950-1, EN60950-1, IEC60950-1
- FCC Part 15, Class A
- EN61000-6-3
- □ EN55022
- EN61000-3-2
- EN61000-3-3

# **EMS**

- EN61000-6-2
  - EN61000-4-2 (ESD Standards) Contact: + / - 4KV; Criteria B Air: + / - 8KV; Criteria B
  - □ EN61000-4-3 (Radiated RFI Standards) 10V/m, 80 to 1000MHz; 80% AM Criteria A
  - EN61000-4-4 (Burst Standards) Signal Ports: + / - 4KV; Criteria B D.C. Power Ports: + / - 4KV; Criteria B A.C. Power Ports: + / - 4KV; Criteria B
- EN61000-4-5 (Surge Standards) Signal Ports: + / - 1KV; Line-to-Line; Criteria B D.C. Power Ports: + / - 0.5KV; Line-to-earth; Criteria B A.C. Power Ports: + / - 2KV; Line-to-earth; Criteria B EN61000-4-6 (Induced RFI Standards)
- Signal Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A D.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A A.C. Power Ports: 10Vrms @ 0.15~80MHz; 80% AM Criteria A
- EN61000-4-8 (Magnetic Field Standards) 30A/m @ 50, 60Hz; Criteria A
- □ EN61000-4-11 (Voltage Dip Standards) A.C. Power Ports: 30% Reduction for 0.5 period; Criteria B

- IEC60068-2-6 Fc (Vibration Resistance) 5g @ 10~150KHz, Amplitude 0.35mm (Operation/Storage/Transport)
- IEC60068-2-27 Ea (Shock)
  - 25g @ 11ms (Half-Sine Shock Pulse; Operation)
- 50g @ 11ms (Half-Sine Shock Pulse; Storage/Transport)
- IEC60068-2-32 Ed (Free Fall)
- 1M (3.281ft.)

NEMA TS1/2 Environmental requirements for Traffic control equipment



# TS100 Series

# 1-port Serial Device Server





The TS100/TS130 series addresses a demand for connecting serial interface based equipment to an Ethernet based local area network.

# Managed Protocol Converter

The TS100/TS130 series is a device that converts between serial RS232/422/485 communication interfaces and Ethernet. The TS100 is managed through a webbased Graphic User Interface (GUI). The IP addressable interface provides userfriendly functions and menus for easy configuration.

## Low-Cost of Ownership

The TS100/TS130 is compatible with software solutions that create virtual COM ports on personal computers. This allows users use the original software for serial-port-based equipment. By eliminating the need to write new software, existing equipment can be connected to a TCP/IP Ethernet network with minimal implementation cost.

# Features

- Provides one port 10/100Base-TX auto-negotiation/Auto MDIX with RJ45 connector, or one port Multi Mode with SC/ST/MT-RJ/VF-45/LC fiber connector, or Single Mode SC/ST fiber connector, or WDM Single Mode SC fiber connector
- ➤ Provides one serial port 4 wires full-duplex asynchronous (RS-422/485) or 2 wires half-duplex asynchronous (RS-485)
- > Provides 3-in-1 RS-232/422/485 serial interfaces
- Complies with IEEE802.3 10Base-T and IEEE 802.3u 100Base-TX, 100Base-FX standards
- ➤ Complies with EIA/TIA RS-232E, EIA/TIA-574
- Extended distances up to 1.2Km (0.74mile) (24AWG) using RS422/485
- LED Indication: PWR, LINK/ACT, FDX, STATUS (ON idle, BLINK -Running)

# Ordering Information

# DC Jack power input:

TS100RJ 1-port RS-232/422/485 to 10/100Base-TX Serial Device Server

TS100C 1-port RS-232/422/485 to 100Base-FX Multi Mode (SC) Serial Device Server TS100T 1-port RS-232/422/485 to 100Base-FX Multi Mode (ST) Serial Device Server

# Terminal Block power input:

TS130RJ 1-port RS-232/422/485 to 10/100Base-TX Serial Device Server

TS130C 1-port RS-232/422/485 to 100Base-FX Multi Mode (SC) Serial Device Server TS130T 1-port RS-232/422/485 to 100Base-FX Multi Mode (ST) Serial Device Server

- \* TS101/TS131 DB25 version series are also available
- \* ST fiber also available in Single Mode, 20Km
- \* SC fiber also available in Single Mode, 20/40/75/100/120Km
- \* SC fiber also available in WDM

# **Power Supply: (Optional)**

- \*Option A The Terminal Block type external power supply are not included. Please order the following part numbers, as required: 41-136046-X X=1,2,3,4,5
- \*\*Option B The external power adapter and power cord are not included. Please order the following part numbers, as required: 41-136044-X X=1,2,3,4,5
- \*See page 4-5 to 4-9 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)

# Technology

## Serial Port:

- Interface: RS-232/422/485 (software selectable)
- Connector: DB9 for RS-232/422/485 (DB25 special order)

# **Serial Communication Parameters:**

- Parity: None, Even, Odd
- Data Bits: 5, 6, 7, 8
- Stop Bit: 1, 2
- Flow Control: None, RTS/CTS, Xon/Xoff
- Speed: 600 bps to 230.4 Kbps

# **Ethernet Port:**

- Interface: 10/100Base-TX; 100Base-FX
- Connector: R-J45 (10/100Base-TX); SC,ST type (100Base-FX)

## Protocols:

• TCP, IP, UDP, Telnet, DHCP, ICMP, HTTP

## Operation mode:

• Virtual COM Port Mode, TCP Mode, UDP Mode

# **OS Driver Support:**

Windows 95/98/2000/XP

# Management:

 Serial Console, Telnet Console, Web Management, Firmware Upgradeable

# Power

## Input:

- Input Voltage: 12VDC
- **Power Consumption:**
- 2.64W Max. 0.22A@12VDC

# Connector

Terminal Block or DC Jack

# Mechanical

## Casing:

Metal case

## **Dimensions:**

• 80.3mm (W) x 109.2mm (D) x 23.8mm (H) (3.16" (W) x 4.3" (D) x 0.94" (H))

# Weight:

• 0.8kg (1.76 lb)

# nstallation:

DIN Rail, Wall Mounting

# Environment

**Operating Temperature:** 

• 0°C to 45°C (32°F to 113°F)

# Storage Temperature

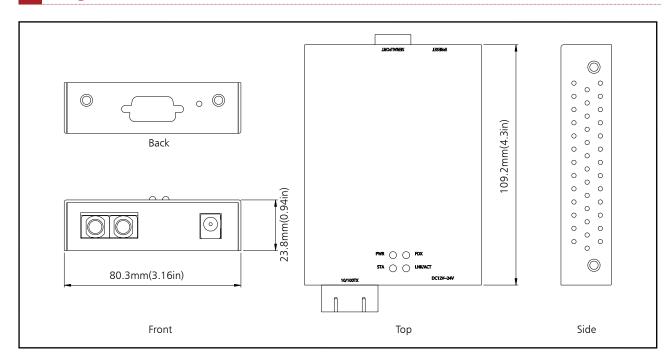
-10°C to 70°C (14°F to 158°F)

# **Ambient Relative Humidity:**

• 5% to 95% non-condensing

# Regulatory Approvals:

• CE Mark Class A, FCC Part 15 Class A, VCCI Class A



# SE5100 Series

1-port Industrial Serial Device Server





SE5100 is a one serial port to one Ethernet port industrial serial device server, which is a cost effective and reliable solution for bridging your serial based equipment to Fast Ethernet networks. SE5100 can transfer serial data through TCP/IP, control remote serial devices with security, thus maximizing managerial efficiency. The serial port supports RS-232/422/485 or isolated RS-422/485, and the LAN port supports 10/100Base-TX or 100Base fiber optics.

# Features

- ► Flexible Serial Interface- RS-232/422/485 or RS-422-485
- ▶ Isolation- 2KV isolated RS-422/485
- ➤ Fiber Option- Support single-mode and multi-mode fiber optics ➤
- ► Flexible Power Input- Including both terminal block and DC jack
- ► Latch- DC jack with latch secures a stable connection
- Flexible Installation Method- Aluminum housing with wall and DIN-Rail mounting
- Port Buffering- 64KB port buffer prevents data loss when connection fails.
- Warning- Inform user by relay output and E-mail in case of disconnection
- Multiple Operation Mode- Support Real COM, TCP server, TCP client, UDP, Pair Connection

# Ordering Information

SE5101-00Z	1-port RS-232/422/485 Serial Device Server with 1-port 10/100Base-TX
SE5101-1XZ	1-port RS-232/422/485 Serial Device Server with 1-port 100Base-FX
SE5110-00Z	1-port isolated RS-422/485 Serial Device Server with 1-port 10/100Base-TX
SE5110-1XZ	1-port isolated RS-422/485 Serial Device Server with 1-port 100Base-FX

# 100FX Fiber Options:

(X) = 1: Multi Mode (SC)

2: Multi Mode (ST)

A: Single Mode (SC) -20Km

B: Single Mode (SC) -40Km

H: Single Mode (ST) -20Km

# Power Input Interface:

(Z) = B: Terminal Block & DC Jack

# **Power Supply: (Optional)**

\*Option A - The Terminal Block type external power supply are not included. Please order the following part numbers, as required: DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X X=1,2,3,4,5

\*\*Option B - The external power adapter and power cord are not included. Please order the following part numbers, as required: 41-136044-X X=1,2,3,4,5

\*See page 4-5 to 4-9 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)





# Technology

## Serial Port:

- Interface: RS-232/422/485
- Connector: DB9 for RS-232/422/485, Terminal Block for RS-422/485
- Line Protection: 15KV ESD
- Isolation: 2KV

# **Serial Communication Parameters:**

- Parity: None, Even, Odd, Space, Mark
- Data Bits: 5, 6, 7, 8
- Stop Bit: 1, 1.5, 2
- Flow Control: None, RTS/CTS, Xon/Xoff
- Speed: 50 bps to 921.6 Kbps

## **Ethernet Port**:

- Interface: 10/100Base-TX; 100Base-FX
- Connector: RJ45 (10/100Base-TX); SC, ST Type (100Base-FX)
- Isolation: Built-in 1.5KV magnetic isolation

## Protocols:

• ICMP, IP, TCP, UDP, DHCP client, BOOTP, Telnet, Rtelnet, DNS, SNMPv2, HTTP, SSH, Reverse SSH, SMTP, SNTP, ARP, RARP, RFC2217

## Operation mode:

Real COM, TCP server, TCP client, UDP, Pair Connection

# **OS Driver Support:**

Windows 2000/XP/2003 COM driver

## Managemen<sup>3</sup>

Web, Telnet console, SNMP

# Port Buffer:

• 64K Bytes

# Power

# Input:

- Input Voltage: 12 to 32VDC (Terminal Block); 12VDC (DC Jack)
- 2.88W Max. 0.24A@12VDC, 0.12A@24VDC

## onnector:

Terminal Block or DC Jack with latch

# Mechanical

## asing:

Aluminum case

# Dimensions:

• 70mm (W) x 110mm (D) x 30 mm(H) (2.76" (W) x 4.33" (D) x 1.18" (H))

# Weight

• 0.25kg (0.55 lb)

## Installation

DIN-Rail, Wall Mounting

## Environment

# **Operating Temperature:**

• -10°C to 60°C (14°F to 140°F)

# Storage Temperature:

• -20°C to 85°C (-4°F to 185°F)

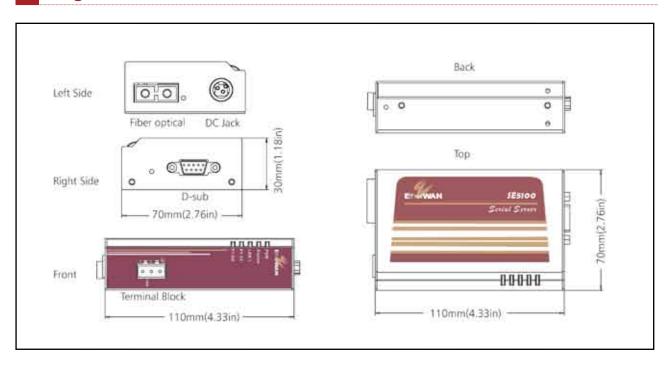
# **Ambient Relative Humidity:**

5% to 95% non-condensing

# **Regulatory Approvals:**

# **Emission Compliance**

• CE Mark Class A, FCC Part 15 Class A, VCCI Class A



# SE5300 Series

2/4 ports Industrial Serial Device Server





SE5300 is a two or four serial ports to two Ethernet ports Industrial serial device server, which is an easy and reliable solution for bridging your serial based equipments to the Fast Ethernet networks. The two Ethernet ports can backup each other to provide redundant network connections for the serial devices connected to SE5300. The serial ports support RS-232/422/485 or isolated RS-422/485, and the LAN ports support 10/100Base-TX or 100Base fiber optics.

# Features

- ➤ Flexible Serial Ports- Support 2 or 4 ports of RS-232/422/485 or RS-422/485
- ▶ Isolation- 2KV isolated RS-422/485
- ➤ Dual LAN Ports- Support redundant function
- Fiber Option- Support single-mode and multi-mode fiber optics
   for both LAN ports
- ➤ Flexible Power Input- Including both terminal block and DC jack ➤ Latch- DC jack with latch secures a stable connection
- Flexible Installation Method- Aluminum housing with wall and DIN-Rail mounting
- Port Buffering- 64KB port buffer prevents data loss when connection fails
- Warning- Inform user by relay output and E-mail in case of disconnection
- Multiple Operation Mode- Support Real COM, TCP server, TCP client, UDP, Pair Connection

# Ordering Information

SE5302-00Z	2-port RS-232/422/485 Serial Device Server with 2-port 10/100Base-TX
SE5302-1XZ	2-port RS-232/422/485 Serial Device Server with 1-port 10/100Base-TX and 1-port 100Base-FX
SE5302-2XZ	2-port RS-232/422/485 Serial Device Server with 2-port 100Base-FX
SE5304-00Z	4-port RS-232/422/485 Serial Device Server with 2-port 10/100Base-TX
SE5304-1XZ	4-port RS-232/422/485 Serial Device Server with 1-port 10/100Base-TX and 1-port 100Base-FX
SE5304-2XZ	4-port RS-232/422/485 Serial Device Server with 2-port 100Base-FX
SE5320-00Z	2-port isolated RS-422/485 Serial Device Server with 2-port 10/100Base-TX
SE5320-1XZ	2-port isolated RS-422/485 Serial Device Server with 1-port 10/100Base-TX and 1-port 100Base-FX
SE5320-2XZ	2-port isolated RS-422/485 Serial Device Server with 2-port 100Base-FX

# 100FX Fiber Options :

(X) = 1: Multi Mode (SC)

2: Multi Mode (ST)

A: Single Mode (SC) -20Km

B: Single Mode (SC) -40Km

H: Single Mode (ST) -20Km

# Power Input Interface:

(Z) = B: Terminal Block & DC Jack

# **Power Supply: (Optional)**

- \*Option A The Terminal Block type external power supply are not included. Please order the following part numbers, as required: DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X X=1,2,3,4,5
- \*\*Option B The external power adapter and power cord are not included. Please order the following part numbers, as required: 41-136044-X X=1,2,3,4,5

\*See page 4-5 to 4-9 for more detailed information about optional accessories (Din-Rail Power supply, Power adapter)

# Technology

# Serial Port

- Interface: RS-232/422/485
- Connector: RJ50 for 4-port RS-232/422/485 DB9 for 2-port RS-232/422/485 Terminal Block for isolated RS-422/485
- Line Protection: 15KV ESD
- Isolation: 2KV

# **Serial Communication Parameters:**

- Parity: None, Even, Odd, Space, Mark
- Data Bits: 5, 6, 7, 8
- Stop Bit: 1, 1.5, 2
- Flow Control: None, RTS/CTS, Xon/Xoff
- Speed: 50 bps to 921.6 Kbps

## **Ethernet Por**

- Interface: 10/100Base-TX; 100Base-FX
- Connector: RJ45 (10/100Base-TX); SC, ST Type (100Base-FX)
- Isolation: Built-in 1.5KV magnetic isolation

• ICMP, IP, TCP, UDP, DHCP client, BOOTP, Telnet, Rtelnet, DNS, SNMPv2, Storage Temperature: HTTP, SSH, Reverse SSH, SMTP, SNTP, ARP, RARP, RFC2217

- Operation mode Real COM, TCP server, TCP client, UDP, Pair Connection
- OS Driver Support: Windows 2000/XP/2003 COM driver

# Management:

Web, Telnet console, SNMP

# Port Buffer:

64K Bytes

# Power

# Input:

- Input Voltage: 12 to 32VDC (Terminal Block); 12VDC (DC Jack)
- 4.32W Max. 0.36A@12VDC, 0.18A@24VDC

• Terminal Block or DC Jack with latch

# Mechanical

Aluminum case

## Dimension:

 100mm (W) x 125mm (D) x 30mm(H) (3.94" (W) x 4.92" (D) x 1.18" (H))

# Weight:

0.3kg (0.66 lb)

## Installation

DIN-Rail, Wall Mounting

# **Environment**

# **Operating Temperature:**

-10°C to 60°C (14°F to 140°F)

• -20°C to 85°C (-4°F to 185°F)

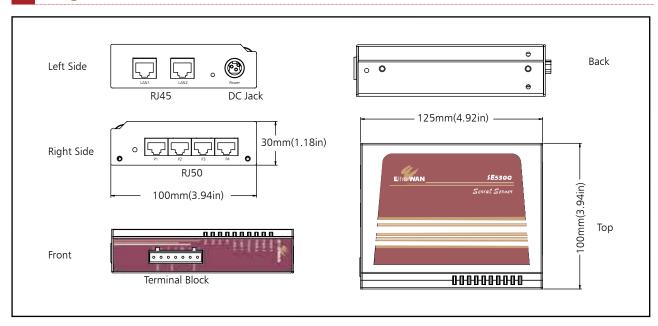
# **Ambient Relative Humidity:**

5% to 95% non-condensing

# **Regulatory Approvals:**

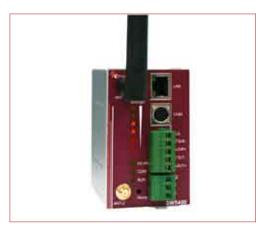
## **Emission Compliance**

CE Mark Class A, FCC Part 15 Class A, VCCI Class A



# SW5400 Series

# 1-port Industrial Serial to Wireless Device Server





SW5400 is a Wireless Serial Device Server connects RS-232/RS-422/RS-485 serial devices to the industry standard 802.11g Wireless Network. Integrating the SW5400 into your serial device benefits in reducing cabling costs and increased mobility, or deploying a data transfer redundancy system. The SW5400 serial device server is suitable for connecting devices used in M2M automation applications such as industrial, building and point-of-sale where high interference area that Ethernet cable is not practical or possible.

# Features

- ➤ Interface- Single- port of selectable RS-232/RS-422 /RS-485 serial mode
- ➤ Protection- 15KV ESD for serial port
- ➤ Wireless- Easily connect any serial and LAN device to an IEEE 802.11b/g 54Mbps wireless Ethernet network
- ➤ Flexible Installation Method- Metal housing with panel mountable and perpendicular to DIN-Rail design
- Multiple Operation Mode- Support Virtual COM, TCP server, TCP client, UDP and Pair Connection
- ➤ Flexible Network Environment Design- Support dual antennas for harsh environment application
- Multiple configuration interfaces- Support console, telnet, built-in web server and windows-based utilities
- Watchdog- Hardware built-in

# Ordering Information

SW5400

1-port Industrial Serial to Wireless Device Server

Installation Type: DIN Rail (mounting kit is included)

Optional Panel mount kit, ordered separately, part number: KP-AA54



# **Power Supply: (Optional)**

The Terminal Block type external power supplies are not included. Please order the following part numbers, as required: DR-30-24, DR-60-24, DR-75-24, DR-120-24 or 41-136046-X X=1,2,3,4,5

# The 2nd Antenna Type: (Optional)

5dBi Antenna, reverse SMA connector, part number: AN19



7dBi Antenna, reverse SMA connector with 200cm cable, part number: AB94-T



# Technology

## Serial Port

Interface: RS-232/422/485

• Connector: Terminal Block and Mini Din (Selectable by software)

Line Protection: 12KV ESD

# Serial Communication Parameters:

Parity: None, Even, Odd, Space, Mark

• Data Bits: 5, 6, 7, 8 Stop Bit: 1, 2

Flow Control: None, RTS/CTS, Xon/Xoff

Speed: 110 bps to 921.6Kbps

# **Ethernet Switch Port:**

Standard Compliance: IEEE802.3, IEEE802.3u

• Interface: 10/100Base-TX Connector: RJ45

Protection: Built-in 1.5 KV magnetic isolation

# Wireless LAN:

Standard Compliance: IEEE802.11b/g

Modulation: CCK, DQPSK, DBPSK, OFDM (802.11g)

TX Power 802.11g: 14dBm / 802.11b: 15dBm

RX Sensitivity: -66dBm @ 54Mbps; -80dBm @ 11Mbps

Transmission Rate: 802.11g up to 54Mbps; 802.11b up to 11Mbps • 5% to 95% non-condensing

• Transmission Distance: up to 300m (@ 12Mbps, in open areas)

Security:

WEP 64-bit/128-bit data encryption WPA/WPA2-PSK compatible (Supported TKIP / AES encryption)

Antenna Connector: 2 x Reverse SMA

Network Mode: Infrastructure mode, Ad-Hoc mode

 ICMP, IP, TCP, UDP, DHCP Client, Telnet, DNS, SNMP, HTTP, SMTP, **SNTP** 

# Operation mode:

• Virtual COM, TCP server, TCP client, UDP, Pair Connection

 Windows utility for Windows 98/2000/XP/2003 Virtual COM for Windows 98/2000/XP/2003

Web server, Telnet console, Serial Console and Windows **Based Utility** 

# Power

Input Voltage: 9 to 30VDC

# **Power Consumption**

4.5W Max. 0.375A@12VDC

Terminal Block

# Mechanical

Metal case

• 55mm (W) x 77.2mm (D) x 88mm (H) (2.17" (W) x 3.04" (D) x 3.46" (H))

# Weight:

0.4kg (0.88 lb)

# Installation:

DIN-Rail, Wall Mounting

## **Environment**

# **Operating Temperature:**

• -10°C to 60°C (140°F to 140°F)

# Storage Temperature:

-20°C to 85°C (-4°F to 185°F)

# **Ambient Relative Humidity:**

# **Regulatory Approvals:**

UL, CUL

# **Emission Compliance:**

FCC Class A, CE Class A

