

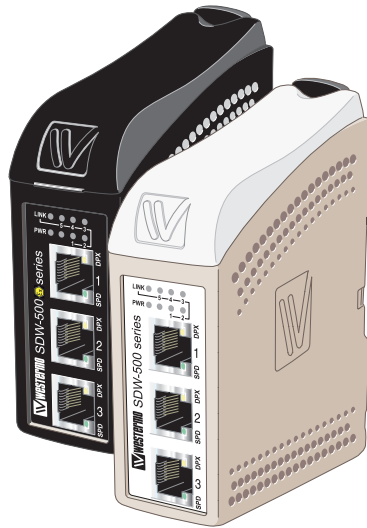
User Guide

6644-2214



SDW-500

S E R I E S



Industrial Ethernet 5-port Switch

www.westermo.com

Legal information

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<http://www.westermo.com>

Safety



Before installation:

Read this manual completely and gather all information on the unit. Make sure that you understand it fully. Check that your application does not exceed the safe operating specifications for this unit.

This unit should only be installed by qualified personnel.

This unit should be built-in to an apparatus cabinet, or similar, where access is restricted to service personnel only.

The power supply wiring must be sufficiently fused, and if necessary it must be possible to disconnect manually from the power supply. Ensure compliance to national installation regulations.

This unit uses convection cooling. To avoid obstructing the air flow around the unit, follow the spacing recommendations (see Installation section).



Before mounting, using or removing this unit:

Prevent access to hazardous voltage by disconnecting the unit from power supply.

Warning! Do not open connected unit. Hazardous voltage may occur within this unit when connected to power supply.



Class 1 Laser Product

Do not look directly into fibre optical fibre port or any connected fibre although this unit is designed to meet the Class 1 Laser regulations.

Care recommendations

Follow the care recommendations below to maintain full operation of unit and to fulfil the warranty obligations.

This unit must not be operating with removed covers or lids.

Do not attempt to disassemble the unit. There are no user serviceable parts inside.

Do not drop, knock or shake the unit, rough handling above the specification may cause damage to internal circuit boards.

Do not use harsh chemicals, cleaning solvents or strong detergents to clean the unit.

Do not paint the unit. Paint can clog the unit and prevent proper operation.

Do not expose the unit to any kind of liquids (rain, beverages, etc). The unit is not waterproof. Keep the unit within the specified humidity levels.

Do not use or store the unit in dusty, dirty areas, connectors as well as other mechanical part may be damaged.

If the unit is not working properly, contact the place of purchase, nearest Westermo distributor office or Westermo Tech support.

Fibre connectors are supplied with plugs to avoid contamination inside the optical port.

As long as no optical fibre is mounted on the connector, e.g. for storage, service or transportation, should the plug be applied.




ATEX Information (Applicable for SDW-500 Ex series only)

General

This unit is intended for use in Zone 2 hazardous location only.


Marking

 II 3 G

Ex nA IIC 140°C (T3) Gc

SPECIAL CONDITION

WARNING – DO NOT SEPARATE WHEN ENERGIZED

| | |
|---|--|
|  | Indicate that this unit complies with relevant European standards that are harmonised with the 94/9/EC Directive (ATEX). |
| II | Equipment group II. This unit can be installed in all places with an explosive gas atmosphere other than mines susceptible to firedamp. |
| 3 | Equipment category 3. A category is the classification according to the required level of protection. This unit ensures the requisite level of protection during normal operation and is intended for use in areas in which explosive atmosphere caused by gases, vapours, mists, or dust mixtures are unlikely to occur or, if they do occur, are likely to do so only infrequently and for a short period only. |
| G | Indicates protection concerning explosive atmospheres caused by gases, vapours or mists (G). |
| Ex | Indicates that this unit is in conformity with relevant European Ex standard(s). |
| nA | The type of protection used. This unit is a non-sparking device "nA" which is constructed to minimize the risk of occurrence of arcs or sparks capable of creating an ignition hazard during conditions of normal operation. |
| IIC | Gas group, a typical gas is hydrogen. |
| 140°C (T3) | Maximum surface temperature assigned = 140°C with the next highest temperature class T3 (T3 = 200°C). This unit is classified in accordance with its maximum surface temperature (external and internal). |
| Gc | Equipment protection level Gc (EPL Gc) Equipment for explosive gas atmospheres, having a "enhanced" level of protection, which is not a source of ignition in normal operation and which may have some additional protection to ensure that it remains inactive as an ignition source in the case of regular expected occurrences. EPL Gc are analogous to the ATEX Categories (Category 3 G = EPL Gc). |
| SPECIAL CONDITION | This unit has a special condition for safe use. The special condition for safe use contains safety related information that is necessary for the correct installation and safe use. |

Ratings and safety control drawing

| Ratings \ Model | SDW-550EX | SDW-541EX-MM-LC2 SDW-541EX-SM-SC15 SDW-541EX-SM-LC40 | SDW-541EX-MM-SC2 SDW-541EX-MM-ST2 SDW-541EX-SM-LC15 |
|-----------------------------|--|--|---|
| Power | (12 – 48) VDC; 320 mA | (12 – 48) VDC; 350 mA | (12 – 48) VDC; 450 mA |
| Ambient temperature | -25°C ≤ Ta ≤ +70°C | | -25°C ≤ Ta ≤ +65°C |
| Maximum surface temperature | 140°C (temperatur class T3) | | |
| Degree of protection | IP 21 | | |
| Installation spacing | Minimum 25 mm above / below and minimum 10 mm left / right | | |

| Ratings \ Model | SDW-532EX-2SM-LC15 SDW-532EX-2MM-LC2 SDW-532EX-2SM-SC15 SDW-532EX-2SM-LC40 | SDW-532EX-2MM-SC2 SDW-532EX-2MM-ST2 |
|-----------------------------|---|--|
| Power | (12 – 48) VDC; 450 mA | (12 – 48) VDC; 600 mA |
| Ambient temperature | -25°C ≤ Ta ≤ +60°C | |
| Maximum surface temperature | 140°C (temperatur class T3) | |
| Degree of protection | IP 21 | |
| Installation spacing | Minimum 25 mm above / below and minimum 10 mm left / right | |



The different models allows these ports to be configured as either copper RJ 45, optical SC, -ST or -LC connection.

Ethernet TX – RJ 45

| Position | Direction* / description | Input / Output values |
|----------|--------------------------|--|
| 1 | In / Out / TD+ | Per port: U = ± 1 V (4μV/s) I = ± 20 mA Data rate: 10/100 Mbit/s |
| 2 | In / Out / TD- | |
| 3 | In / Out / RD+ | |
| 4 | Not connected | |
| 5 | Not connected | |
| 6 | In / Out / RD- | |
| 7 | Not connected | |
| 8 | Not connected | |
| Shield | HF-connected | |

Galvanically isolated via signal transformers and capacitively isolated to signal ground through 3 kV 470 pF capacitor.

Ethernet FX – SC, ST or LC

| Position | Direction* / description | Input / Output values |
|----------|--------------------------|---------------------------|
| Rx | In / Receive port | Max optical power = 5 dBm |
| Tx | Out / Transmit port | |

Power

| Position | Direction* / description | Input / Output values |
|----------|--------------------------|--|
| 1 | In / COM | U _{in} = (9.6 – 57.6) VDC Max I _{in} = 0.6 A @ 9.6 VDC Max P _{in} = 6 W |
| 2 | In / +VA | |
| 3 | In / +VB | |

SPECIAL CONDITION FOR SAFE USE

Ambient temperature:

This unit is designed for use in extreme ambient temperature conditions according to the following:

SDW-550: $-25^{\circ}\text{C} \leq T_a \leq +70^{\circ}\text{C}$

SDW-541: $-25^{\circ}\text{C} \leq T_a \leq +65^{\circ}\text{C}$

SDW-532: $-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

Installation in an apparatus cabinet:

This unit requires installation in an Ex certified apparatus cabinet suitable for the area of use and providing a degree of protection of at least IP54.

Resistance to impact:

This unit requires installation in an apparatus cabinet where adequate resistance to impact is provided by the apparatus cabinet. See "Installation in an apparatus cabinet" above for requirements on the external apparatus cabinet.

Resistance to light:

This unit requires installation in an apparatus cabinet where it is protected from light (for example daylight or light from luminaires).

See "Installation in an apparatus cabinet" above for requirements on the external apparatus cabinet.

Secureness of plugs:

When this unit is installed in an explosive atmospheres, all connectors must be mechanically secured to prevent loosening.

Conductor temperature:

When this unit is installed in locations with high ambient temperature, special precautions shall be taken upon the choice of external conductors and the temperature rating of the conductor(s).

Directive 94/9/EC alongside with other directives:

Directive 2004/108/EC (EMC) applies and to assure a safe performance of this unit under the scope of Directive 94/9/EC, refer to the electromagnetic immunity level specified under "Type tests and environmental conditions" in this manual.

Standards and date of compliance

EN 60079-0 and EN 60079-15

2011-04-15

Note. Fibre Optic Handling

Fibre optic equipment needs special treatment. It is very sensitive to dust and dirt. If the fibre will be disconnected from the modem the protective hood on the transmitter/receiver must be connected. The protective hood must be kept on during transportation. The fibre optic cable must also be handle the same way.

If this recommendation not will be followed it can jeopardise the warranty.

Cleaning of the optical connectors

In the event of contamination, the optical connectors should be cleaned by the use of forced nitrogen and some kind of cleaning stick.

Recommended cleaning fluids:

- Methyl-, ethyl-, isopropyl- or isobutyl-alcohol
- Hexane
- Naphtha

Maintenance

No maintenance is required, as long as the unit is used as intended within the specified conditions.

Agency approvals and standards compliance

| Type | Approval / Compliance |
|--------|--|
| EMC | EN 61000-6-2, Immunity industrial environments |
| | EN 61000-6-3 ¹ , Emission residential environments |
| | EN 61000-6-4 ² , Emission industrial environments |
| | E-Mark, Road Vehicles, 10R-04 7216 ⁶ |
| Safety | UL 60950-1, 1st Edition ³ |
| Marine | DNV Standard for Certification no. 2.4 ⁴ |
| Ex | EN 60079-0 and EN 60079-15 ⁵ |
| Note | <p>¹ – Applicable only for 3644-000x and 3644-0015</p> <p>² – Applicable only for 3644-0019, 3644-002x and 3644-003x</p> <p>³ – Applicable only for 3644-000x (SDW-550 och SDW-550 EC)</p> <p>⁴ – Applicable only for 3644-0001, 3644-0022 , 3644-0023, 3644-0025, 3644-0032, 3644-0033, 3644-0035 (SDW-550, SDW-532-MM-LC15, SDW-532-MM-LC2, SDW-532-SM-LC40, SDW-532-2SM-LC15, SDW-532-2SM-LC2, SDW-532-2SM-LC40)</p> <p>⁵ – Applicable only for SDW-5xx Ex series</p> <p>⁶ _ Applicable only for 3644-6001 (SDW-550 E-mark)</p> |

Declaration of Conformity



Declaration of conformity

The manufacturer Westermo Teleindustri AB
SE-640 40 Stora Sundby, Sweden

Herewith declares that the product(s)

| Type of product | Model | Art no |
|----------------------------|-------------------|--|
| Industrial Ethernet switch | SDW-500 series | 3644-0001, -0005, -0015, -0019, -0020, -0021, -0022, -0023, -0024, -0025, -0030, -0031, -0032, -0033, -0034, -0035 |
| | SDW-500 EX series | 3644-5001, -5020, -5021, -5022, -5023, -5024, -5025, -5030, -5031, -5032, -5033, -5034, -5035 |
| | SDW-550 E-mark | 3644-6001 |

is in conformity with the following EC directive(s).

| No | Short name |
|----------------------|--|
| 2004/108/EC | Electromagnetic Compatibility (EMC) |
| 94/9/EC ¹ | Equipment Explosive Atmospheres (ATEX) |
| 2011/65/EU | Restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) |

References of standards applied for this EC declaration of conformity.

| No | Title | Issue |
|---------------------------|---|-------|
| EN 61000-6-2 | Electromagnetic compatibility – Immunity for industrial environments | 2005 |
| EN 61000-6-3 ² | Electromagnetic compatibility – Emission for residential environments | 2007 |
| EN 61000-6-4 ³ | Electromagnetic compatibility – Emission for industrial environments | 2007 |
| EN 60079-0 ¹ | Explosive atmospheres Equipment – General requirements | 2009 |
| EN 60079-15 ¹ | Electrical apparatus for explosive gas atmospheres – Construction, test and marking of type of protection “n” electrical apparatus | 2005 |

The last two digits of the year in which the CE marking was affixed:

14

Signature

Pierre Öberg
Technical Manager
12th Mars 2014

¹ Applicable for SDW-500 EX series.

² Applicable for 3644-000x, 3644-0015 and 3644-6001

³ Applicable for 3644-0019, 3644-002x and 3644-003x.

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Org.nr/
Corp. identity number
556361-2604

Registered office
Eskilstuna

Environmental conditions

| Isolation between interfaces | |
|----------------------------------|--|
| Power Interface to all other | 2.8 kV DC 2.0 kV RMS @ 50 Hz and 60 s duration |
| TX signal Interface to all other | 2.1 kV DC 1.5 kV RMS @ 50 Hz and 60 s duration |
| TX shield Interface to all other | 1.5 kV DC 1.0 kV RMS @ 50 Hz and 60 s duration |

| Environmental | |
|---|---|
| Temperature, operating | -25 to +70°C (SDW-550), -25 to +65°C (SDW-541) -25 to +60°C (SDW-532) |
| Temperature, storage and transportation | -25 to +70°C |
| Relative humidity, operating | 5 to 95% (non-condensing) |
| Relative humidity, storage and transportation | 5 to 95% (condensation allowed outside packaging) |

| Mechanical | |
|-----------------------|-------------------|
| Dimension (W x H x D) | 35 x 121 x 119 mm |
| Weight | 0.2 kg |
| Mounting | DIN-rail |
| Degree of protection | IP21 |

| Configuration | |
|--|--|
| Auto configured (auto-negotiation) or manually setting of speed and duplex of individual TX port, by DIP-switches. | |
| Port mirror function is possible to set with DIP-switch. With the port mirror function active the switch will copy all outgoing traffic to port 1. This can be used to monitor all traffic going out from the switch. Packets may be discarded if the total throughput exceeds the port speed of port 1. | |

Fibre optic power budget

| Model | Multimode MM-xx2 | Singlemode SM-SC15 | Singlemode SM-LC15 | Singlemode SM-LC40 |
|--|--------------------|--------------------|--------------------|--------------------|
| Transmitted wavelength | 1310 nm | 1310 nm | 1310 nm | 1310 nm |
| Min. output power, transmitter | -19 dBm | -15 dBm | -15 dBm | -5 dBm |
| Max. output power, transmitter | -12 dBm | -8 dBm | -8 dBm | 0 dBm |
| Input sensitivity, receiver | -31 dBm | -34 dBm | -31 dBm | -34 dBm |
| Min. power budget | 12 dBm | 19 dBm | 16 dBm | 29 dBm |
| Max. power budget | 19 dBm | 26 dBm | 23 dBm | 34 dBm |
| Recommended fibre cable and core / cladding diameter | 50/125 62.5/125 | 9/125 10/125 | 9/125 10/125 | 9/125 10/125 |

Attenuation in connectors / splices

| Type | Normal attenuation |
|-------------------|--------------------|
| Connector | 0.2 - 0.4 dBm |
| Fusion splice | 0.1 dBm |
| Mechanical splice | 0.2 dBm |

1. Description

The SDW-550 is an Industrial Ethernet 5-port switch.

All ports support auto-negotiation, but DIP-switches also allow speed and duplex configuration of any individual TX port. It is also possible to set up one port to monitor traffic to/from the switch.

The SDW-550 has been designed to meet high industrial specifications, providing very high dependability in harsh environmental conditions.

Features:

- ⌘ TX shields individually isolated
- ⌘ Wide DC power range 12 – 48 VDC
- ⌘ Wide temperature range
- ⌘ Automatic MDI/MDI-X crossover
- ⌘ LED indicators for Power, Speed, Duplex, Link and Traffic
- ⌘ Port monitoring
- ⌘ 35 mm DIN rail mounting
- ⌘ Enable or disable of flow control

Example of applications are:

- ⌘ 5-port switch
- ⌘ Ethernet isolator, for STP networks

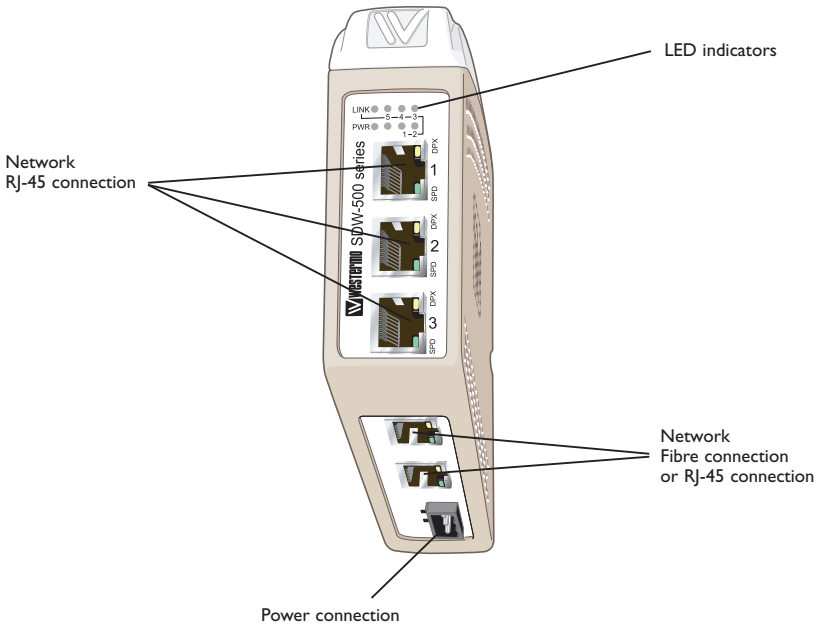
Interface specifications

| Power SDW-500 series | | |
|-----------------------------|---------------------------------------|--------|
| Rated voltage | 12 – 48 VDC, polarity protected | |
| Operating voltage | 9.6 – 57.6 VDC | |
| Rated current | @12 VDC power input | |
| | SDW-550 | 320 mA |
| | SDW-541-MM-SC2 | 450 mA |
| | SDW-541-MM-ST2 | 450 mA |
| | SDW-541-SM-LC15 | 450 mA |
| | SDW-541-SM-SC15 | 350 mA |
| | SDW-541-SM-LC40 | 350 mA |
| | SDW-541-MM-LC2 | 350 mA |
| | SDW-532-2-MM-SC2 | 600 mA |
| | SDW-532-2-MM-ST2 | 600 mA |
| | SDW-532-2-SM-LC15 | 450 mA |
| | SDW-532-2-SM-SC15 | 450 mA |
| | SDW-532-2-SM-LC40 | 450 mA |
| SDW-532-2-MM-LC2 | 450 mA | |
| SDW-532-MM-SC2-SM-SC15 | 450 mA | |
| Rated frequency | DC | |
| Connection | Detachable screw terminal | |
| Connector size | 0.2 – 2.5 mm ² (AWG 24-12) | |

| Ethernet TX | |
|--------------------------|---|
| Electrical specification | IEEE std 802.3. 2000 edition |
| Data rate | 10 Mbit/s or 100 Mbit/s, manual or auto |
| Duplex | Full or half, manual or auto |
| Connection | SC, ST or LC |
| Circuit type | Optical |
| Transmission range | 100 m |

| Ethernet FX | |
|--------------------------|---|
| Electrical specification | IEEE std 802.3. 2000 edition |
| Data rate | 10 Mbit/s or 100 Mbit/s, manual or auto |
| Duplex | Full or half, manual or auto |
| Connection | SC, ST or LC |
| Circuit type | Optical |
| Transmission range | 100 m |

Connections



Available models:

- ⌘ SDW-550 10/100Base-T/TX: 5 ports
- ⌘ SDW-541 10/100Base-T/TX: 4 ports 100Base-FX: 1 port
- ⌘ SDW-532 10/100Base-T/TX: 3 ports 100Base-FX: 2 ports

NOTE! SDW-532-MM-SC2-SM-SC15

Port 4: SC Single mode 15 km connector

Port 5: SC Multi mode 2 km connector

Power

The SDW-500 series supports redundant power connection.

The positive input are +VA and +VB, the negative input for both supplies are COM.

The power is drawn from the input with the highest voltage.



| 3-pos screw terminal | Description | Power |
|----------------------|-------------|-------------------|
| 1 | COM | 0 V |
| 2 | +VA | A: 9.6 – 57.6 VDC |
| 3 | +VB | B: 9.6 – 57.6 VDC |

TX

Ethernet TX connection (RJ-45 connector), automatic MDI/MDI-X crossover.

| Contact | Signal Name | Direction | Description/Remark |
|---------|-------------|-----------|---------------------------|
| 1 | TD+ | In/Out | Transmitted/Received data |
| 2 | TD- | In/Out | Transmitted/Received data |
| 3 | RD+ | In/Out | Transmitted/Received data |
| 4 | – | – | – |
| 5 | – | – | – |
| 6 | RD- | In/Out | Transmitted/Received data |
| 7 | – | – | – |
| 8 | – | – | – |
| Shield | – | – | HF-connected |



CAT 5 cable is recommended.

Unshielded (UTP) or shielded (STP) connector might be used.

FX SC Multi- or single mode (optional)

Ethernet FX connection.

1300 nm multi- or singlemode fibre transceiver with SC-connector.

The dust protection plug shall be mounted when no fibre is connected.



FX ST Multi mode (optional)

Ethernet FX connection.

1300 nm multi mode fibre transceiver with ST-connector.

The dust protection plugs shall be mounted when no fibre is connected.



FX LC Multi- or single mode (optional)

Ethernet FX connection.

1300 nm singlemode fibre transceiver with LC-connector.

The dust protection plug shall be mounted when no fibre is connected.



LED indicators

At power on the PWR flashes during initialising.

Indicators (LED) Power (PWR)
 Link (LINK) of every port
 Speed (SPD) and duplex (DPX) of TX ports

| LED | Status | Indication of |
|-----------|------------|--|
| PWR | ON | Internal power, initialising OK |
| | Slow flash | Initialisation progressing |
| | Fast flash | Initialisation error |
| LINK | OFF | No Ethernet link |
| | ON | Good Ethernet link |
| | Flash | Ethernet data is transmitted or received, traffic indication |
| SPD | OFF | 10 Mbit/s |
| (TX only) | ON | 100 Mbit/s |
| DPX | OFF | Half duplex |
| (TX only) | ON | Full duplex |

DIP switch settings SDW-550

DIP-switches are accessible under the lid on top of the unit. DIP-switches are used to configure the unit.



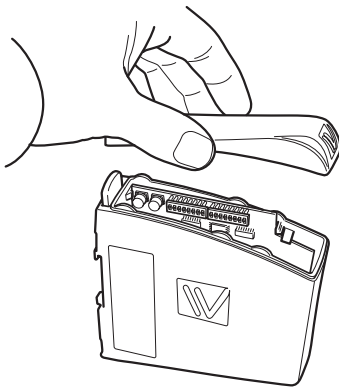
Warning!

Prevent damage to internal electronics from electrostatic discharges (ESD) by discharging your body to a grounding point (e.g. use of wrist strap), before the lid on top/front of the unit is removed.



Warning! Do not open connected equipment.

Prevent access to hazardous voltages by disconnecting the unit from AC/DC mains supply and all other electrical connections.

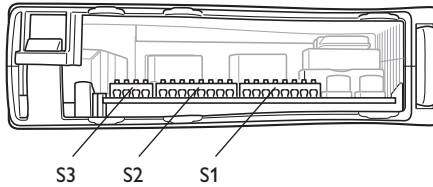


NOTE

When configuration via DIP-switches, the settings of DIP-switches configure the unit only after a reboot (power off/on).

To be observe when the DIP-switches will be configured

- ⌘ Speed and duplex setting only valid when auto-negotiation is disabled.
- ⌘ When monitoring selected all outgoing packets from the switch is also copied to the port 1.
- ⌘ Speed and duplex switch settings are ignored for FX ports.
- ⌘ If auto-negotiation and auto MDI/MDI-X disabled all TX ports support MDI-X configuration.



Port 1 settings

S1 ON Auto-negotiation and auto MDI/MDI-X disabled
 1 2 3 4 5 6 7 8

S1 ON Auto-negotiation and auto MDI/MDI-X enabled
 1 2 3 4 5 6 7 8

S1 ON 10 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON 100 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON Half duplex selected
 1 2 3 4 5 6 7 8

S1 ON Full duplex selected
 1 2 3 4 5 6 7 8

Port 3 settings

S1 ON Auto-negotiation and auto MDI/MDI-X disabled
 1 2 3 4 5 6 7 8

S1 ON Auto-negotiation and auto MDI/MDI-X enabled
 1 2 3 4 5 6 7 8

S1 ON 10 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON 100 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON Half duplex selected
 1 2 3 4 5 6 7 8

S2 ON Full duplex selected
 1 2 3 4 5 6 7 8

S2 ON Full duplex selected
 1 2 3 4 5 6 7 8

Port 2 settings

S1 ON Auto-negotiation and auto MDI/MDI-X disabled
 1 2 3 4 5 6 7 8

S1 ON Auto-negotiation and auto MDI/MDI-X enabled
 1 2 3 4 5 6 7 8

S1 ON 10 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON 100 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S1 ON Half duplex selected
 1 2 3 4 5 6 7 8

S1 ON Full duplex selected
 1 2 3 4 5 6 7 8

Port 4 settings

S2 ON Auto-negotiation and auto MDI/MDI-X disabled
 1 2 3 4 5 6 7 8

S2 ON Auto-negotiation and auto MDI/MDI-X enabled
 1 2 3 4 5 6 7 8

S2 ON 10 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S2 ON 100 Mbit/s speed selected
 1 2 3 4 5 6 7 8

S2 ON Half duplex selected
 1 2 3 4 5 6 7 8

S2 ON Full duplex selected
 1 2 3 4 5 6 7 8

Port 5 settings

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 Auto-negotiation and auto MDI/MDI-X disabled

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 Auto-negotiation and auto MDI/MDI-X enabled

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 10 Mbit/s speed selected

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 100 Mbit/s speed selected

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 Half duplex selected

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 Full duplex selected

Port mirroring settings

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 No monitoring selected

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

 Monitoring selected

Flow control selected

S3

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

 Flow control selected

S3

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

 No flow control selected

Factory settings

S1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

S2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|

S3

| | | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
|---|---|---|---|

DIP switch settings SDW-541 and SDW-532

DIP-switches are accessible under the lid on top of the unit. DIP-switches are used to configure the unit.



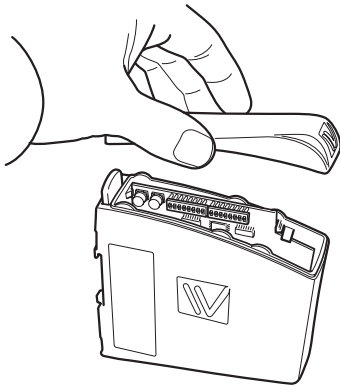
Warning!

Prevent damage to internal electronics from electrostatic discharges (ESD) by discharging your body to a grounding point (e.g. use of wrist strap), before the lid on top/front of the unit is removed.



Warning! Do not open connected equipment.

Prevent access to hazardous voltages by disconnecting the unit from AC/DC mains supply and all other electrical connections.









NOTE

When configuration via DIP-switches, the settings of DIP-switches configure the unit only after a reboot (power off/on).







To be observe when the DIP-switches will be configured

- ⌘ Speed and duplex setting only valid when auto-negotiation is disabled.
- ⌘ When monitoring selected all outgoing packets from the switch is also copied to the port 1.
- ⌘ Speed and duplex switch settings are ignored for FX ports.
- ⌘ If auto-negotiation and auto MDI/MDI-X disabled all TX ports support MDI-X configuration.







Port 1 settings

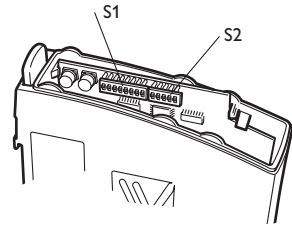
- S1  Auto-negotiation and auto MDI/MDI-X disabled
- S1  Auto-negotiation and auto MDI/MDI-X enabled
- S1  10 Mbit/s speed selected
- S1  100 Mbit/s speed selected
- S1  Half duplex selected
- S1  Full duplex selected

Port 2 settings







- S1  Auto-negotiation and auto MDI/MDI-X disabled
- S1  Auto-negotiation and auto MDI/MDI-X enabled
- S1  10 Mbit/s speed selected
- S1  100 Mbit/s speed selected
- S1  Half duplex selected
- S1  Full duplex selected

Port 3 settings

- S1  Auto-negotiation and auto MDI/MDI-X disabled
- S1  Auto-negotiation and auto MDI/MDI-X enabled
- S1  10 Mbit/s speed selected
- S1  100 Mbit/s speed selected
- S1  Half duplex selected
- S2  Full duplex selected





Port 4 settings*

- S2  Auto-negotiation and auto MDI/MDI-X disabled
- S2  Auto-negotiation and auto MDI/MDI-X enabled
- S2  10 Mbit/s speed selected
- S2  100 Mbit/s speed selected
- S2  Half duplex selected
- S2  Full duplex selected

* Setting of port 4 is only possible when using SDW-541. These settings are ignored when using SDW-532

Port mirroring settings

- S2  No monitoring selected
- S2  Monitoring selected

Factory settings

- S1  S2 



Installation

Mounting / Removal

Before mounting or removing the unit:

Prevent damage to internal electronics from electrostatic discharges (ESD) by discharging your body to a grounding point (e.g. use of wrist strap).

Prevent access to hazardous voltages by disconnecting the unit from AC/DC mains supply and all other electrical connections.

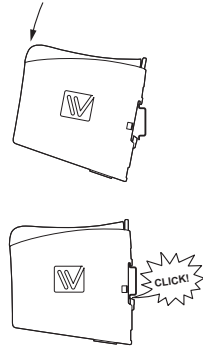
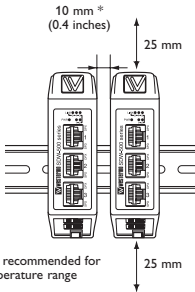
Mounting

This unit should be mounted on 35 mm DIN-rail which is horizontally mounted on a wall or cabinet backplate.

This unit uses convection cooling. To avoid obstructing the airflow around the unit, use the following spacing rules.

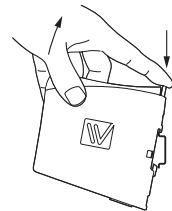
Recommended spacing 25 mm (1.0 inch) above/below and 10 mm (0.4 inches) left/right the unit.

Snap on mounting, see figure



Removal

Press down the black support at the back of the unit, see figure.





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