

Compact 4-port Ethernet Fibre Switch

Westermo SDI-541-MM-SC2 / SM-SC30

- 4-ports 10/100TX and 1 multi-mode or single-mode Fibre Compact Fast Ethernet Switch
- 3.2Gbit/s Switch Fabric with excellent data exchange performance
- Variable power input, AC 18 – 27V / DC 18 – 32V
- Fault relay alarm
- Aluminum case with IP-31 grade protection
- –10 ~ 60°C operating temperature



The Westermo SDI-541 is an industrial fast Ethernet switch with four 10/100Base-TX ports and one 100Base-FX port. Two versions are available with the SC2 variant capable of data transmission over 2 km with multi-mode fibre or 30 km by single-mode fibre using the SC30 model. Its compact IP31 rated aluminum case allows the unit to be fitted into a very small space on an industry standard DIN rail.

The Westermo SDI-550 can operate with variable power sources being able to accept AC 18 ~ 27V or DC 18 ~ 32V on a removable connector block.

A single relay output is provided to allow port link down events to be indicated. This function is configured by a simple DIP switch.

The switch requires no user setup and will immediately start to operate on power up. The 3.22 Gbit/s switch core ensures that no data delay occurs within the switch.

Specifications

| Technology | |
|-----------------------------|--|
| Standard | IEEE802.3 10Base-T |
| | IEEE802.3u 100Base-TX |
| | IEEE802.3u 100Base-FX |
| | IEEE802.3x flow control |
| Switch Technology | Store and forward technology and with 3.2 Gbit/s switch fabric |
| Aggregate System Throughput | 1.49 Mpps |

| Interface | |
|-----------------------|--|
| Number of Ports | 4 x 10/100 Base-TX with Auto MDI/MDI-X function, Auto-Negotiation 1 x 100Base-FX supports multi-mode or single mode Fibre |
| Connectors | 10/100 Base-TX: RJ-45 100Base-FX: Duplex SC Power/Relay: 4-pin terminal block |
| Cables | RJ-45 connector: supports CAT-3, CAT-4, CAT-5 unshielded twisted pair or shielded twisted pair cable. The link distance is maximum 100 meters. Fibre: SC, multi-mode or single-mode Multi-mode Fibre: 50/125 µm or 62.5/125 µm, max. distance 2 km Single-mode Fibre: 8/125 µm, 9/125 µm or 10/125 µm, max. distance 30 km |
| Fibre Transceiver | <i>Westermo SDI-541-MM-SC2, multi-mode Fibre</i> Link Distance: 2 km (Max.), Wave-length: 1310 nm, Min Tx Power: -20 dBm, Max Tx Power: -14 dBm, Min Rx Sensitivity: 0 dBm, Max Rx Sensitivity: -31 dBm, Link budget: 11 dBm <i>Westermo SDI-541-SM-SC30, single-mode Fibre</i> Link Distance: 30 km (Max.), Wave-length: 1310 nm, Min Tx Power: -15 dBm, Max Tx Power: -8 dBm, Min Rx Sensitivity: 0 dBm, Max Rx Sensitivity: -34 dBm, Link budget: 19 dBm |
| Port Alarm DIP Switch | DIP 1 ~ 5: Enable or disable port link down alarm for RJ-45 port 1 ~ 4, Fibre port 5. On: Enable port link down alarm. Off: Disable port link down alarm |
| Diagnostic LED | System: Power (green), Fault (red on) RJ-45 port: 100 Mbit/s Link (green on) / Activity (green flashing) 10 Mbit/s Link (yellow on) / Activity (yellow flashing) Fibre port: Link/Activity (green) |

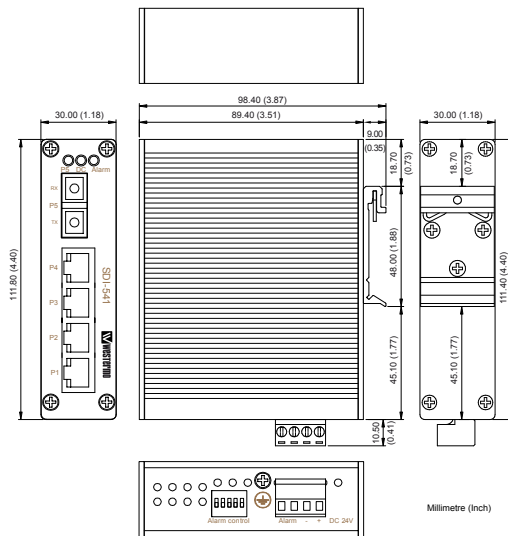
| Power Requirements | |
|--------------------|--|
| System Power | 2 pins from 4-pin terminal block for DC or AC power input. DC 18~32V with reverse polarity protection. AC 18 ~ 27V, 47 ~ 63 Hz |
| Power Consumption | 4 Watts @ DC 24V |

| Mechanical | |
|--------------|---|
| Installation | DIN-Rail mount |
| Case | Aluminum case with IP-31 protection |
| Dimension | 111.8 mm (H) x 30 mm (W) x 98.2 mm (D) (with DIN rail clip) 111.8 mm (H) x 30 mm (W) x 89 mm (D) (without DIN rail clip) |
| Weight | 377 g with package |
| | 295 g without package |

| Environmental | |
|-----------------------|--------------------------------|
| Operating Temperature | -10 ~ 60°C |
| Operating Humidity | 0% ~ 95%, (non-condensing) |
| Storage Temperature | -40 ~ 85°C |
| Hi-Pot | 1.5 KV for all ports and power |

| Regulatory Approvals | |
|----------------------|--|
| EMI | FCC Class A, CE/EN55022 |
| EMS | EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8 |
| Safety | CE/EN60950 |
| Shock | IEC60068-2-27 |
| Vibration | IEC60068-2-6 |
| Free Fall | IEC60068-2-32 |
| Warranty | 5 years |

Dimensions (Unit – mm / In)



Millimetre (Inch)

| Ordering Information | |
|----------------------|---|
| Art.no | Description |
| 3625-0001 | Westermo SDI-541-MM-SC2, 2 km Quick Installation Guide |
| Art.no | Description |
| 3625-0010 | Westermo SDI-541-SM-SC30, 30 km Quick Installation Guide |