Compact 4-port Ethernet Fibre Switch

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

- 4-ports 10/100 TX 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 – 27 V / DC 18 – 32 V
- Fault relay alarm
- Aluminum case with IP-31 grade protection
- –10 ~ 60°C operating temperature

CE FC RoHS

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 ~ 27 V or DC 18 ~ 32 V 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

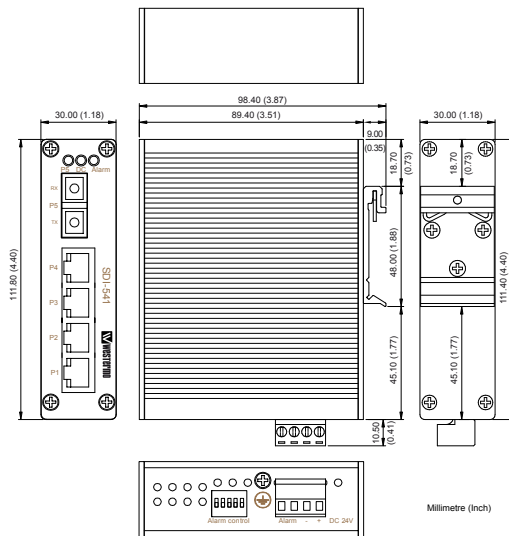| Interface	
Number of Ports	4 x 10/100 Base-TX with Auto MDI/MDI-X function, Auto-Negotiation 1 x 100Base-FX supports multi-mode or single mode Fibre
Connectors	10/100 Base-TX: RJ-45 100Base-FX: Duplex SC Power/Relay: 4-pin terminal block
Cables	RJ-45 connector: supports CAT-3, CAT-4, CAT-5 unshielded 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	*Westermo SDI-541-MM-SC2, multi-mode Fibre* 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 *Westermo SDI-541-SM-SC30, single-mode Fibre* 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 ~ 27 V, 47 ~ 63 Hz
Power Consumption	4 Watts @ DC 24 V

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