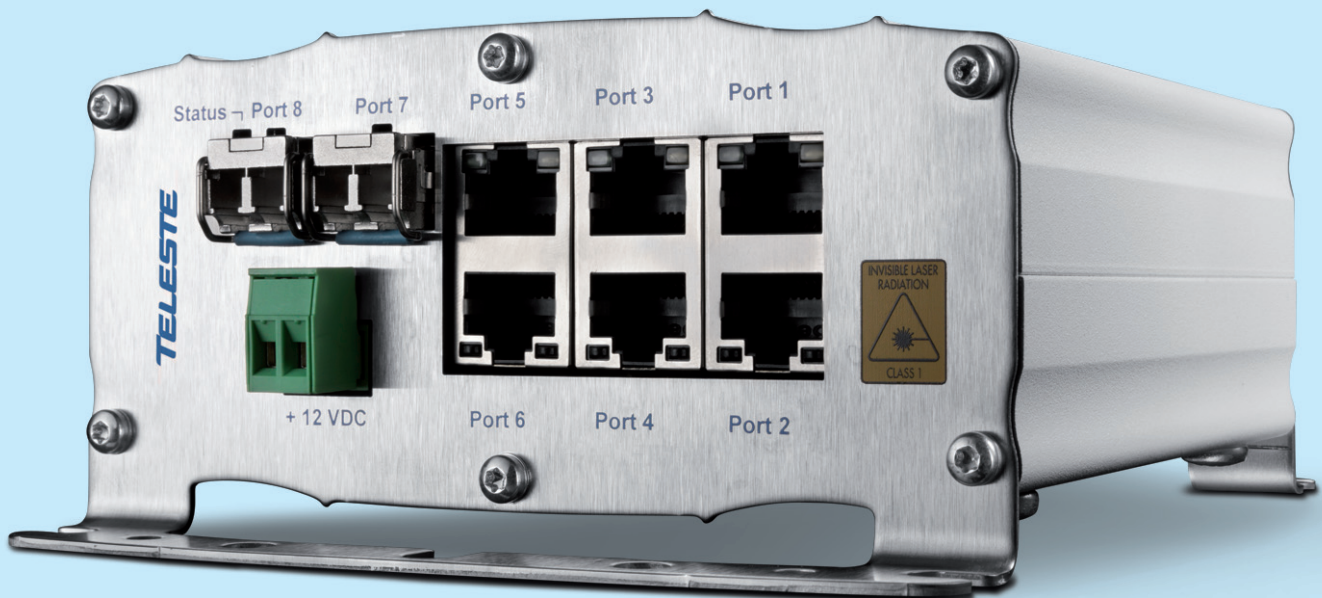
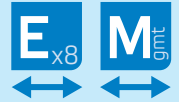


# Eight port Fast Ethernet switch

MPC is a common nominator for compact size stand-alone units in the MPX platform. The MPC-SF is a robust, temperature hardened 8-port layer-2 managed Fast Ethernet switch for video networking applications.



The MPC-SF family switches are designed for Ethernet networks in mission-critical real-time control applications as well as for LAN extensions.

Installations are made easy with the MDI/MDIX and auto-polarity supported by the 10/100Base-TX local ports.

The up-link interfaces, either one or two, support optical 100Base ports.

The optical interface is available for multimode and singlemode fibres in

variety of link budgets and optical wavelengths. In addition to standard 1310 nm and 1550 nm outputs, the MPC-SF can be equipped with ITU-T CWDM grid compliant output.

The MPC-SF supports fast network redundancy with link recovery, either based on standard RSTP/STP or proprietary FRNT 0.

High multicast load is handled by the IGMP snooping feature.

Management of the MPC-SF switches is done locally or remotely via WebUI.

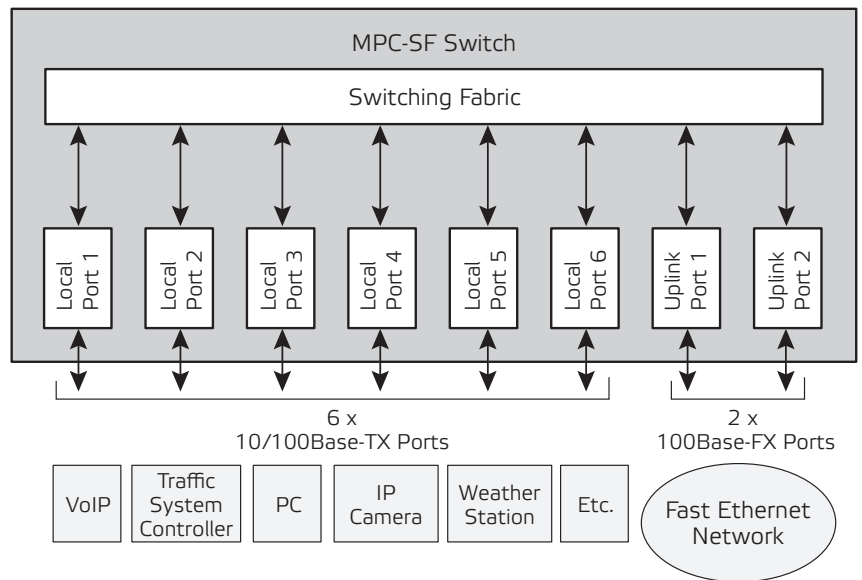
Excellent real time properties are offered through both layer 2 and layer 3 priority support with four priority queues (QoS).

The MPC-SF switches are temperature hardened for enhanced environmental performance.

## Features

- 6 x 10/100Base-TX local ports
- Auto-negotiation and auto sensing of speed and full duplex per TX port
- 2 x 100Base-FX full duplex up-link ports
- Small form pluggable optics (SFP), several link budget variations available
- FRNT v0 – redundant ring
- RSTP with STP fallback
- IGMP v1, v2 & v3 snooping
- VLAN support; port based VLAN with tag removal possibility
- SNMP v2c
- MAC address filtering per port
- QoS based on layer 2 (IEEE802.1p) and layer 3 (IP ToS)
- Low power consumption
- Password protected user access
- User friendly WebUI
- Feasible for temperature hardened operation

## Block diagram



## Technical specifications *(Typical values unless otherwise stated, \* = optional)*

Up-link ports (SFP)*			Performance		
Number of ports	1 or 2	full duplex	Switching fabric	Non-blocking	layer 2
Standard	100Base-FX	MMF & SMF	MAC address table size	2048 kB	
<u>Optical</u>			QoS (Quality of Service)	High-speed non blocking QoS switch fabric with 4 traffic classes. 1Mbit shared frame buffer	
MMF 1310 nm	2 km	2 fibres	<b>Management</b>		
SMF 1310 nm	30 / 60 km	2 fibres	WebUI local via ethernet port & remote via network		
SMF 1550 nm	20 / 100 / 120 km	2 fibres	SNMP remote via network		
BIDI SMF 1310/1550 nm	25 / 60 km	1 fibre	<b>General</b>		
BIDI SMF 1550/1310 nm	25 / 60 km	1 fibre	Supply voltage	10.5...25 V DC	
CWDM (ITU G.694.2)	100 km	2 fibres	Power consumption	5 W	no fiber version
Connector type	LC	MMF & SMF		5.7 W	one SFP transceiver
				6.4 W	two SFP transceivers
Local ports			PSU connector type	2-pin removable screw terminal	
Number of ports	6	full duplex	Dimensions (H x W x D)	60 x 130 x 130 mm (2.4 x 5.1 x 5.1")	
Standard	10/100Base-TX	CAT5/CAT5e	Weight	1.0 kg (2.2 lb)	
Connector type	RJ-45	CAT5 (UTP)	Housing	Stand-alone, DIN-rail mount *	
Protocols			MTBF	> 150.000 h	HRD5
802.3	10Base-T		Operating temperature	-34...+74 °C (-29...+165 °F)	
802.3u	100Base-TX, -FX		Storage temperature	-40...+80 °C (-40...+176 °F)	
802.1q	VLAN		Humidity	95 %	non condensing
802.1d	STP		Vibration	EN50130-5 1995	
802.1w	RSTP		Damp heat	BS2011 p2.1	
802.1p	QoS	layer 2	EMC compatibility	EN61000-6-4, CE, FCC	
802.3p	QoS	layer 3 (IP ToS)	Susceptibility	EN50130-4	
802.3x	flow control		Safety	EN60950	
IGMP	version 1, 2 & 3				
FRNT v0	redundant ring	proprietary protocol			
SNMP	version 2c				
DHCP		IP address acquisition			
FLHP		proprietary protocol			