

Data Sheet

52-Port 10G Multi Fiber L3 Switch 19"



Layer3

Layer3 feature set for broad application diversity



10G uplinks (IEEE 802.3ae)

4 x 1/10G uplink ports in SFP/SFP+ design



Multi fiber switch

High port density of fiber ports for cost efficient high performance networks



IT security

Feature set for high level of IT security



Network redundancy

Feature set for meshed topologies



MICROSENS NMP integrated*

Integrated in MICROSENS NMP software for clear administration and easy group configurations

Software Features

System Management

- WEB GUI (IPv4 and IPv6 http/https)
- CLI (IPv4/IPv6 Telnet, IPv4/IPv6 ssh, console)
- SNMP v1/v2/v3
- SNMP traps
- Stacking via 4x SFP+ uplink ports (up to 4 devices)
- Integration in Central management software (NMP)*
- Ipv4/IPv6 DHCP client
- Syslog
- RMON 1, 2, 3, 9
- Dual images and multiple profiles
- LLDP
- Port and CPU mirroring, RSPAN and ERSPAN
- IPv4/IPv6 FTP/TFTP
- System reboot
- IPv4/IPv6 SNTP/NTP
- System status and CPU monitoring
- Temperature and power warning messages
- Ping and cable inspection
- Flow monitoring
- OAM, VSF

Energy Management

- Support of 802.3az
- Smart fan control
- SFP power management

DHCP

- IPv4/IPv6 DHCP Server
- IPv4/IPv6 DHCP Relay
- Support of option 37/38
- Support of option 82
- IPv4/IPv6 DHCP Snooping

IP Routing

- IPv4/IPv6 Static Routing
- IPv4/IPv6 RIP
- OSPF
- BGP
- PBR routing
- VRRP (Virtual Redundant Route Protocol)

Virtual LANs (VLANs)

- Port-based VLAN
- IEEE 802.1Q VLAN
- Private VLAN
- Voice VLAN
- MAC-based and protocol-based VLAN
- Q-in-Q double tagging (general and flexible)
- VLAN translation
- N:1 VLAN translation

Quality of Service (QoS)

- Layer 1 priority (port-based)
- Layer 2 priority based on 802.1Q VLAN tags
- Layer 3 priority based on 802.1p (DSCP)
- 8 priority levels (4 queues)
- SP, WRR, SWRR and DWRR queue scheduling
- Policy mapping
- ACL-based streams: VLAN ID, CoS, ToS, DSCP, IPv6 flow label stream classification

IP Multicast

- IGMP v1/v2/v3 Snooping
- IGMP Fast Leave
- MLD v1/v2 Snooping
- Multicast VLAN
- IPv4/IPv6 DCSCM

Software Features

Reliability

- Spanning Tree (STP) according to IEEE 802.1D
- Rapid Spanning Tree (RSTP) according to IEEE 802.1w
- Multiple Spanning Tree (MSTP)
- Multi-process MSTP
- G.8032
- EMVTE (ULPP+ULSM) and MRPP
- Loopback detection, VCT, DDM
- LACP
- Static Link Aggregation

Security

- RADIUS client
- TACACs+
- 802.1X authentication (including extended 802.1X)

- IP-, port-, MAC-, or VLAN-based binding combinations
- MAC filtering
- Port-based and VLAN-based MAC number limits
- ARP protection against ARP spoofing and ARP flooding
- IP Source Guard
- Dos protection
- Port speed limit
- Broadcast storm control
- ND snooping
- Access Control List (based on IP, MAC, VLAN, port, TCP/UDP source ...)
- ACL-based redirection
- Time based ACL activation
- Traffic statistics analysis based on ACL

Technical Specifications

Switch

Type	10 Gigabit Ethernet L3 Switch – 19" 1U
Performance	Store-and-forward
Switching Capacity	364 Gbps (non-blocking)
MAC addresses	16 k
Jumbo Frames	10 kBytes

Fiber Ports (SFP slots)

Number	48
Type	100/1000Base-X SFP slot,
Connector	LC (SFP transceiver, not included in the scope of delivery)

Fiber Ports (SFP+ slots)

Number	4
Type	10GBase-X SFP+ slot
Connector	LC (SFP transceiver, not included in the scope of delivery)

CLI Console

Type	RS-232
Connector	RJ-45 port

OoB Port

Type	Ethernet
Connector	RJ-45 port

LEDs

Port LEDs	Link/activity
Device LED	Power, RPS, diagnostic and management

Main Power Supply

Type	Built-in power supply (230 VAC)
Input Voltage	100..240 VAC
Frequency	50/60 Hz
Power Consumption	60 W
Connector	Cold device plug

Redundant Power Supply

Type	Redundant power supply (12 VDC)
Input Voltage	11..13 VDC
Power Consumption	60 W

Environmental Conditions

Temperature	Operation	0..+50 °C
	Storage	-40..+70 °C
Humidity	10..90 %, non-condensing	

Mechanic

Dimensions (in mm)	440 x 320 x 44 (W x D x H, without connectors)
Mounting	19" (1U)

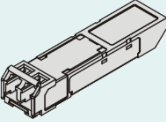
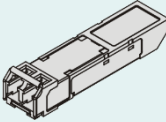
Standards

CE	2014/30/EU (EMC) 2014/35/EU (Low Voltage Directive) 2011/65/EU (RoHS)
-----------	---

Order Information

	Description	Article No.:
	52-Port 10G Multi Fiber L3 Switch 19"	
	52-Port 10G Multi Fiber L3 Switch 19" 4x 1/10GBase-X SFP+-Slots, managed L3, 48x 1000Base-X SFP-Slots, OOB-Port (RJ-45), int. 100~240VAC (C14), console port (RJ-45)	MS400991M

Accessories

	Description	Article No.:
	SFP Transceiver (xWDM on request)	
	SFP GbE Transceiver 1.25G SX Multimode 850nm, DDM, LC duplex	MS100200D
	SFP GbE Transceiver 1.25G LX SingleMode 1310nm, 10km, DDM, LC duplex	MS100210D
	SFP+ Transceiver (WDM on request)	
	SFP+ 10G Transceiver SR Multimode 850nm, DDM, LC	MS100700D
	SFP+ 10G Transceiver LR Single mode 1310nm, 10km, DDM, LC	MS100702D

Alternative 19" Multi Fiber Switches

	Description	Article No.:
	28-Port 10G Multi Fiber L2/L3 Switch 19"	
	28-Port 10G Multi Fiber L2/L3 Switch 19" 4x 1/10GBase-X SFP+-Slots, managed, 24x 1000Base-X SFP-Slots, 8x Combo, int. 100~240VAC (C14), console port (RJ-45)	MS400990M

This document in whole or in part may not be duplicated, reproduced, stored or retransmitted without prior written permission of MICROSENS GmbH & Co. KG. All information in this document is provided 'as is' and subject to change without notice. MICROSENS GmbH & Co. KG disclaims any liability for the correctness, completeness or quality of the information provided, fitness for a particular purpose or consecutive damage. MICROSENS is a trademark of MICROSENS GmbH & Co. KG. Any product names mentioned herein may be trademarks and/or registered trademarks of their respective companies. MG0521 DAT300_MS400991M_19i-10G-L3-Fiberswitch_EN_2021

*In preparation.

Publication: 2021-05-21/MG