

# Data sheet

## Fast Ethernet 19' Switch, 2-20 ports, ports on rear - AFS670-EREEAAAATTTTEEEEPZEX08.0

**Fast/Gigabit Ethernet 19' Switch:Fast Ethernet 19' Switch:Fast Ethernet 19' Switch, 2-20 ports, ports on rear**

**Name** Fast Ethernet 19' Switch, 2-20 ports, ports on rear



	Ethernet/Fast Ethernet/-Switch, ports on rear, managed, Industrial Switch 19" cabinet mount, fanless Design, software layer 2 Professional
<b>Delivery informations</b>	
Availability	available
<b>Product description</b>	
Description	Ethernet/Fast Ethernet/-Switch, ports on rear, managed, Industrial Switch 19" cabinet mount, fanless Design, software layer 2 Professional
Port type and quantity	Fast-Ethernet ports in total: 16; 8 x Twisted Pair; 8 x Multimode ST
Type	AFS670-EREEAAAATTTTEEEEPZEX08.0
Order No.	AFS670-EREEAAAATTTTEEEEPZEX08.0
<b>More Interfaces</b>	
Power supply/signaling contact	Power supply 1: power supply 3-pin terminal block, signal contact 2-pin terminal block; Power supply 2: not assembled
V24 interface	1 x RJ11 socket
USB interface	1 x USB to connect CRA (configuration recovery adapter)
<b>Network size - cascading</b>	
Line - / star topology	any
Ring structure, quantity switches	up to 10 ms (10 switches), up to 30 ms (50 switches), up to 40 ms (100 switches), up to 60 ms (200 switches)
<b>Power requirements</b>	
Operating voltage	Power supply 1: 120/250 VDC, 110/230 VAC; Power supply 2: not assembled
Current consumption at 24 V DC	150mA (35W) max, if all ports are equipped with fiber
Current consumption at 230 V AC	150mA (35W) max, if all ports are equipped with fiber
<b>Software</b>	
Management	Serial interface, web-interface, SNMP V1/V2/V3, SW file transfer HTTP/TFTP, AFS-View Network Management, LLDP-MED
Diagnostics	LEDs, log-file, syslog, relay contact, RMON, port mirroring 1:1 and n:1, topology discovery 802.1AB, cable tester (TX), address conflict detection, network error detection, SFP diagnostic [temperature, optical input and output power (µW and dBm)], Trap for configuration saving and changing, duplex mismatch detection, disable learning, Port Monitor
Configuration	Command line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, AFS Finder, easy device exchange with Configuration Recovery Adapter CRA (automatic software and/or configuration upload), automatic script load from CRA, integrated DHCP server per port, DHCP relay, automatic invalid configuration undo, SFP Whitelist, ARC automatic ring configuration (MRP), automatic port shutdown (link flapping), configuration signature (water marking), overload detection
Security	Port Security (IP und MAC) with multiple addresses (MAC 50 per port), SNMP V3, SSH, Authentication (IEEE802.1x), 802.1x Multi Client Authentication, Guest VLAN and Unauthenticated VLAN, Port based Radius VLAN assignment
Redundancy functions	MRP, E-MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP in parallel, link aggregation, multiple rings
Filter	QoS 4 classes, prioritisation (IEEE 802.1D/p), VLAN (IEEE 802.1Q), Voice VLAN, shared VLAN learning, Q-in-Q double VLAN tagging, multicast IGMP v1/v2/v3 (snooping/querier), multicast detection unknown multicast, broadcast-, unicast-, multicast limiter, fast aging, GMRP IEEE 802.1D
Industrial Profiles	IEC61850 protocol (MMS Server, Switch Model)
Time synchronisation	SNTP Server, PTP / IEEE 1588, realtime clock with energy buffer
Flow Control	Flow Control 802.3x, Port Priority 802.1D/p, Priority (TOS/DIFFSERV), Prio (MAC/IP), Prio Mapping (TOS Layer2), Traffic Shaping (Unicast, Multicast, Broadcast) Ingress / Egress
<b>Ambient conditions</b>	
Operating temperature	-40 °C ... 85 °C
Storage/transport temperature	-40 °C ... 85 °C
Relative humidity (non-condensing)	10 % ... 95 %
Protective paint on PCB	No
<b>Mechanical construction</b>	
Dimensions (W x H x D)	445 mm x 44 mm x 308 mm
Mounting	19" control cabinet
Protection class	IP30
<b>Mechanical stability</b>	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	1 mm, 2 Hz - 13.2 Hz, 90 min.; 0.7g, 13,2 Hz - 100 Hz, 90 min.; 3.5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.

**Fast/Gigabit Ethernet 19' Switch:Fast Ethernet 19' Switch:Fast Ethernet 19' Switch, 2-20 ports, ports on rear**

**EMC interference immunity**

EN 61000-4-2 electrostatic discharge (ESD)	8 kV contact discharge, 15 kV air discharge
EN 61000-4-3 electromagnetic field	35 V/m (80-2700 MHz); 1 kHz, 80% AM
EN 61000-4-4 fast transients (burst)	4 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line, IEC61000-4-5: power line 5 kV (line/earth)
EN 61000-4-16 mains frequency voltage	30 V, 50 Hz continuous; 300 V, 50 Hz 1 s

**EMC emitted immunity**

FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A

**Approvals**

Safety of industrial control equipment	cUL 508
Substation	IEC 61850-3, IEEE 1613

**Scope of delivery and accessories**

Scope of delivery	Device, operating manual
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For more information please contact:

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