

Ethernet network
Modicon extended managed switches

Device type			Extended Managed switches, 8 ports, copper twisted pair	
				
Interfaces	Copper cable ports	Number and type	8 x 10/100BASE-TX ports	
		Shielded connectors	RJ45	
		Medium	Shielded twisted pair, category CAT 5E	
		Total length of pair	100 m/328 ft	
	Fiber optic ports	Number and type	–	
		Connectors	–	
		Medium	–	
	Length of fiber	50/125 µm	–	
		62.2/125 µm	–	
		9/125 µm	–	
	Attenuation analysis	50/125 µm fiber	–	
		62.2/125 µm fiber	–	
		9/125 µm fiber	–	
Ethernet services		Ethernet TCP/IP, SSH, HTTP, HTTPS, SNMP, MRP (Media Redundancy Protocol), RSTP SFTP, SCP, LLDP, configuration via web server, VLAN, multicast filtering, data stream control secure port, IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet TFTP, address conflict detection, port monitoring, port mirroring, port hardening	configuration via web server, VLAN, multicast filtering, data stream control, secure port IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet, TFTP, address conflict detection, port monitoring, port mirroring, port hardening	
Topology	Number of switches	Cascaded	Unlimited	
		Redundant in a ring	50 max.	
Redundancy		Redundant power supplies, redundant single ring, ring coupling, rings supporting MRP, Fast HiPER Ring and RSTP	ring coupling, redundant power supplies, redundant single ring, HiPER ring, dual RSTP	
Power supply	Voltage		24...48 V $\overline{\text{---}}$ (10...60 V $\overline{\text{---}}$) SELV	
	Consumption		10 W	
	Removable terminal block		2 x 2 - pin	
Operating temperature		0...+ 60°C/+ 32...+ 140°F	-40...+ 85°C/-40...+ 185°F	
Relative humidity		10...95% non-condensing		
Degree of protection		IP 30		
Dimensions		W x H x D 120 x 137 x 115 mm/4.72 x 5.39 x 4.53 in.		
Mounting		On symmetrical DIN rail, 35 mm/1.38 in. wide		
Weight		1.000 kg/2.204 lb		
Conforming to standards		IEC/EN 61131-2, IEC 61850-3, UL 508, UL 1604 class 1 division 2, CSA 22.2 No. 214 (cUL), CSA 22.2 No. 213 class 1 division 2 (cUL), Cc, GL, C-Tick, LR, BV, ATEX Zone 2	IEC/EN 61131-2, UL 508, UL 1604 class 1 division 2, CSA 22.2 No. 214 (cUL), CSA 22.2 No. 213 class 1 division 2 (cUL), Cc LR, GL, BV, C-Tick	
LED indicators		Power supply status, alarm relay status, active redundancy, redundancy management, copper port status, and copper port activity		
Alarm relay		Detected fault (power supply, Ethernet network, or communication port) (volt-free contact 1 A max. at 24 V $\overline{\text{---}}$, 2-way)		
Reference		TCSESM083F23F1TCSESM083F23F1C		
Pages		33		

(1) Length dependent on the attenuation analysis and attenuation of the fiber (typical value: 2,000 m/6,561 ft).
(2) Length dependent on the attenuation analysis and attenuation of the fiber (typical value: 15,000 m/49,212 ft).

Extended Managed switches, 8 ports, copper twisted pair and fiber optic				
				
6 x 10/100BASE-TX ports				
RJ45				
Shielded twisted pair, category CAT 5E				
100 m/328 ft				
2 x 100BASE-FX ports				
Duplex SC				
Multimode fiber			Single-mode fiber	
5,000 m/16,404 ft (1)			–	
4,000 m/13,123 ft (1)			–	
–			30,000 m/98,425 ft (2)	
8 dB			–	
11 dB			–	
–			16 dB	
Ethernet TCP/IP, SSH, HTTP, HTTPS, SNMP, MRP (Media Redundancy Protocol), RSTP SFTP, SCP, LLDP, configuration via web server, VLAN, multicast filtering, data stream control secure port, IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet, TFTP, address conflict detection, port monitoring, port mirroring, port hardening		configuration via web server, VLAN, multicast filtering, data stream control, secure port IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet, TFTP, address conflict detection, port monitoring, port mirroring, port hardening	Ethernet TCP/IP, SSH, HTTP, HTTPS, SNMP, MRP (Media Redundancy Protocol), RSTP SFTP, SCP, LLDP, configuration via web server, VLAN, multicast filtering, data stream control secure port, IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet, TFTP, address conflict detection, port monitoring, port mirroring, port hardening	configuration via web server, VLAN, multicast filtering, data stream control, secure port IGMP Snooping, SMTP V3, SNMP-Traps and SYSLOG, priority port, Telnet, TFTP, address conflict detection, port monitoring, port mirroring, port hardening
Unlimited				
50 max.				
Redundant power supplies, redundant single ring, ring coupling, rings supporting MRP, Fast HiPER Ring and RSTP		ring coupling, redundant power supplies, redundant single ring, HiPER ring, dual RSTP	Redundant power supplies, redundant single ring, ring coupling, rings supporting MRP, Fast HiPER Ring and RSTP	ring coupling, redundant power supplies, redundant single ring, HiPER ring, dual RSTP
24...48 V $\overline{\text{---}}$ (10...60 V $\overline{\text{---}}$) SELV				
12 W max.				
2 x 2 - pin				
0...+ 60°C/+ 32...+ 140°F		-40...+ 85°C/-40...+ 185°F	0...+ 60°C/+ 32...+ 140°F	-40...+ 85°C/-40...+ 185°F
10...95% non-condensing				
IP 30				
120 x 137 x 115 mm/4.72 x 5.39 x 4.53 in.				
On symmetrical DIN rail, 35 mm/1.38 in. wide				
1.000 kg/2.204 lb				
IEC/EN 61131-2, IEC 61850-3, UL 508, UL 1604 class 1 division 2, CSA 22.2 No. 214 (cUL), CSA 22.2 No. 213 class 1 division 2 (cUL), Cc, GL, C-Tick, LR, BV, ATEX Zone 2		IEC/EN 61131-2, UL 508, UL 1604 class 1 division 2, CSA 22.2 No. 214 (cUL), CSA 22.2 No. 213 class 1 division 2 (cUL), Cc	IEC/EN 61131-2, IEC 61850-3, UL 508, UL 1604 class 1 division 2, CSA 22.2 No. 214 (cUL), CSA 22.2 No. 213 class 1 division 2 (cUL), Cc, GL, C-Tick, LR, BV, ATEX Zone 2	UL 1604 Class 1 Division 2, EN/IEC 61131-2 CSA C22.2 No 213 Class I Division 2 CSA C22.2 No 214, UL 508
Power supply status, alarm relay status, active redundancy, redundancy management, fiber optic port status and fiber optic port activity				
Detected fault (power supply, Ethernet network, or communication port) (volt-free contact 1 A max. at 24 V $\overline{\text{---}}$, 2-way)				
TCSESM063F2CU1		TCSESM063F2CU1C	TCSESM063F2CS1	TCSESM063F2CS1C
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