





# Ethernet network

## Modicon lite and basic managed switches

Device type		Lite managed switch, 4 ports, copper twisted pair	Basic managed switch, 8 ports, copper twisted pair	
				
Interfaces	Copper cable ports	Number and type Shielded connectors Medium Total length of pair	8 x 10/100BASE-TX ports RJ45 Shielded twisted pair, category CAT 5E 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	Web Management, HTTPS, SNMP V1/V2/V3, BOOTP server, DHCP server, Ethernet Switch Configurator, Log files, remote monitoring (RMON), Topology Discovery	SNTP client, multicast filtering for optimization of the Global Data protocol, configuration via Web access, IGMP Snooping, RSTP (Rapid Scanning Tree Protocol), priority port	
	USB	–	–	
	Topology	Number of switches Cascaded Redundant in a ring	Unlimited 50 max.	Unlimited 50 max.
	Redundancy	Industry standard redundancy protocol (RSTP) enabling deployment of ring and mesh network architectures	P1 and P2 redundant power supplies, redundant single ring, ring coupling	P1 and P2 redundant power supplies, redundant single ring, ring coupling
	Power supply	Voltage	12...24 V $\bar{\text{---}}$ (9.6...32 V) SELV	12...24 V $\bar{\text{---}}$ (9.6...32 V) SELV
		Consumption	2.35 W	6 W
Removable terminal block		3 - pin	6 - pin (redundant power supplies)	
Operating temperature	0...+ 50 °C/+ 32...122 °F	0...+ 60 °C/+ 32...+ 140 °F		
Relative humidity	5...95% non-condensing	10...95% non-condensing		
Degree of protection	IP 30	IP 20		
Dimensions	W x H x D	25 x 114 x 79 mm/0.98 x 4.49 x 3.11 in.	47 x 131 x 111 mm/1.85 x 5.15 x 4.37 in.	
Mounting		On symmetrical DIN rail, 35 mm/1.38 in. wide	On symmetrical DIN rail, 35 mm/1.38 in. wide	
Weight		0.103 kg/0.227 lb	0.400 kg/0.882 lb	
Conforming to standards		IEEE 802.1d-2004), UL 61010-1/-2-201, FCC 47CFR Part 15, Class A, EN55022 Class A, EN 61000-4-2, -3, -4, -5, -6, IEC 60068-2-6, IEC 60068-2-27, IEC/EN60060-2-30Db, LLDP IEEE 802.1ab	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), CE	
LED indicators		Power supply status, link status, data rate	Power supply status, alarm relay status, active redundancy, redundancy management, copper port status, and copper port activity	
Alarm relay		Immediately reports unusual events by sending them to a management station via SNMP	Detected fault (power supply, Ethernet network, or communication port) (volt-free contact 1 A max. at 24 V $\bar{\text{---}}$ )	
Reference		<b>TCSESL043F23F0</b>	<b>TCSESB083F23F0</b>	
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(1) Length dependent on the attenuation analysis and attenuation of the fiber (typical value: 2,000 m/6,561 ft).

Device type		Basic managed switches, 8 and 9 ports, copper twisted pair and fiber optic		
				
Interfaces	Copper cable ports	Number and type Shielded connectors Medium Total length of pair	6 x 10/100BASE-TX ports RJ45 Shielded twisted pair, category CAT 5E 100 m/328 ft	
	Fiber optic ports	Number and type Connectors Medium	2 x 100BASE-FX ports Duplex SC Multimode fiber 5,000 m/16,404 ft (1) 4,000 m/13,123 ft (1)	
	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	Web Management, HTTPS, SNMP V1/V2/V3, BOOTP server, DHCP server, Ethernet Switch Configurator, Log files, remote monitoring (RMON), Topology Discovery	SNTP client, multicast filtering for optimization of the Global Data protocol, configuration via Web access, IGMP Snooping, RSTP (Rapid Scanning Tree Protocol), priority port	
	USB	–	–	
	Topology	Number of switches Cascaded Redundant in a ring	Unlimited 50 max.	Unlimited 50 max.
	Redundancy	Industry standard redundancy protocol (RSTP) enabling deployment of ring and mesh network architectures	P1 and P2 redundant power supplies, redundant single ring, ring coupling	P1 and P2 redundant power supplies, redundant single ring, ring coupling
	Power supply	Voltage	12...24 V $\bar{\text{---}}$ (9.6...32 V) SELV	12...24 V $\bar{\text{---}}$ (9.6...32 V) SELV
		Consumption	2.35 W	8 W
Removable terminal block		3 - pin	6 - pin (redundant power supplies)	
Operating temperature	0...+ 50 °C/+ 32...122 °F	0...+ 60 °C/+ 32...+ 140 °F		
Relative humidity	5...95% non-condensing	10...95% non-condensing		
Degree of protection	IP 30	IP 20		
Dimensions	W x H x D	25 x 114 x 79 mm/0.98 x 4.49 x 3.11 in.	74 x 131 x 111 mm/2.91 x 5.15 x 4.37 in.	
Mounting		On symmetrical DIN rail, 35 mm/1.38 in. wide	On symmetrical DIN rail, 35 mm/1.38 in. wide	
Weight		0.103 kg/0.227 lb	0.410 kg/0.904 lb	
Conforming to standards		IEEE 802.1d-2004), UL 61010-1/-2-201, FCC 47CFR Part 15, Class A, EN55022 Class A, EN 61000-4-2, -3, -4, -5, -6, IEC 60068-2-6, IEC 60068-2-27, IEC/EN60060-2-30Db, LLDP IEEE 802.1ab	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), CE	
LED indicators		Power supply status, link status, data rate	Power supply status, alarm relay status, active redundancy, redundancy management, fiber optic port status, and fiber optic port activity	
Alarm relay		Immediately reports unusual events by sending them to a management station via SNMP	Detected fault (power supply, Ethernet network, or communication port) (volt-free contact 1 A max. at 24 V $\bar{\text{---}}$ )	
Reference		<b>TCSESB083F2CU0</b>	<b>TCSESB093F2CU0</b>	
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(1) Length dependent on the attenuation analysis and attenuation of the fiber (typical value: 2,000 m/6,561 ft).