Robust data distribution: Ethernet switches for field applications

Industrial Ethernet switches (unmanaged)

6-port Ethernet switch compatible with all common automation protocols and IIoT applications

Flexible voltage supply with or without daisy chain

Suited for mobile machines thanks to increased operating voltage and temperature range

Robust housings, food-grade option available

Ethernet switches for field applications

The decentralised modules serve as network nodes between the participants in the field. They are connected directly via robust and reliable M12 connection cables. The use of EVC connection cables with ecolink technology ensures a particularly robust connection and thus reliable data transfer. The M12 connector ensures a much more secure connection than an RJ-45 connector - especially outside the control cabinet.

Robust proven materials

The Ethernet modules are the perfect choice, even in the most difficult environments: The materials and production methods are identical to the EVC jumper cables.

Products

Design	Description	Order no. Coolant	Order no. Food
Ethernet 6-port switches (unmanaged)			
	StandardLine IIoT (TCP/IP), EtherNet/IP, Modbus TCP	**AL3050**	**AL3051**
	StandardLine PROFINET CC-A	**AL3000**	**AL3001**
	PerformanceLine IIoT (TCP/IP), EtherNet/IP, Modbus TCP	**AL3150**	**AL3151**
	PerformanceLine PROFINET CC-A	**AL3100**	**AL3101**

Advantages and customer benefits

- **Expansion of the IO-Link master family**

  The Ethernet switches are the perfect addition to ifm's IO-Link master family. They feature the same design, port configuration and standardised M12 connections.

- **Also suited for mobile machines**

  With their increased operating temperature and voltage range as well as high vibration and shock resistance, the switches are also suited for harsh environments. In addition, the E20 approval means that the product is also suited for use outside vehicles.

- **Simple voltage supply**

  The Ethernet modules offer different connection options for the voltage supply: an A-coded M12 connector and an L-coded M12 connector. The latter can be daisy-chained to other modules of the product family.

Connection technology

Design	Description	Order no. Coolant	Order no. Food
Ethernet cable		**RJ45 - M12**	
	0.5 m	**EVC924**	**EVF549**
	2 m	**EVC926**	**EVF551**
	5 m	**EVC927**	**EVF552**
	10 m	**EVC928**	**EVF553**
Ethernet cable		**M12 - M12**	
	0.5 m	**EVC904**	**EVF429**
	2 m	**EVC906**	**EVF531**
	5 m	**EVC907**	**EVF532**
	10 m	**EVC908**	**EVF533**
	20 m	**EVC909**	**EVF534**
Socket, A-coded (power)		**M12 - open**	
	2 m; 1 mm²	**EVC706**	**EVF480**
	5 m; 1 mm²	**EVC707**	**EVF481**
	10 m; 1 mm²	**EVC708**	**EVF482**
		–	–
Socket, L-coded (power)		**M12 - open**	
	2 m; 2.5 mm²	**E12641**	–
	5 m; 2.5 mm²	**E12642**	–
	10 m; 2.5 mm²	**E12643**	–
		–	–
Connection cable, L-coded (power)		**M12 - M12**	
	2 m; 2.5 mm²	**E12654**	–
	5 m; 2.5 mm²	**E12655**	–
	10 m; 2.5 mm²	**E12656**	–
		–	–

Further technical data

Unmanaged Ethernet switches		AL3050 IIoT / AL3000 PROFINET CC-A	AL3051 IIoT / AL3001 PROFINET CC-A	AL3150 IIoT / AL3100 PROFINET CC-A	AL3151 IIoT / AL3101 PROFINET CC-A
		StandardLine		PerformanceLine	
Operating voltage	[V DC]	8...32 (US; to SELV / PELV)			
Current consumption	[mA]	100 (US)			
Interface		Ethernet			
Number of ports		6			
Transmission standard		10Base-T (IEEE 802.3i); 100Base-TX (802.3u)			
Transmission rate	[MBits/s]	10; 100			
Ambient temperature	[°C]	-25...70			
Daisy chain voltage supply		no		yes	
Voltage supply connection		M12 A-coded		M12 L-coded	
Protection rating		IP 65, IP 66, IP 67	IP 65, IP 66, IP 67, IP 69K	IP 65, IP 66, IP 67	IP 65, IP 66, IP 67, IP 69K
Housing material		polyamide; socket: nickel-plated brass	polyamide; socket: stainless steel	polyamide; socket: nickel-plated brass	polyamide; socket: stainless steel

We reserve the right to make technical alterations without prior notice. · 04.2021