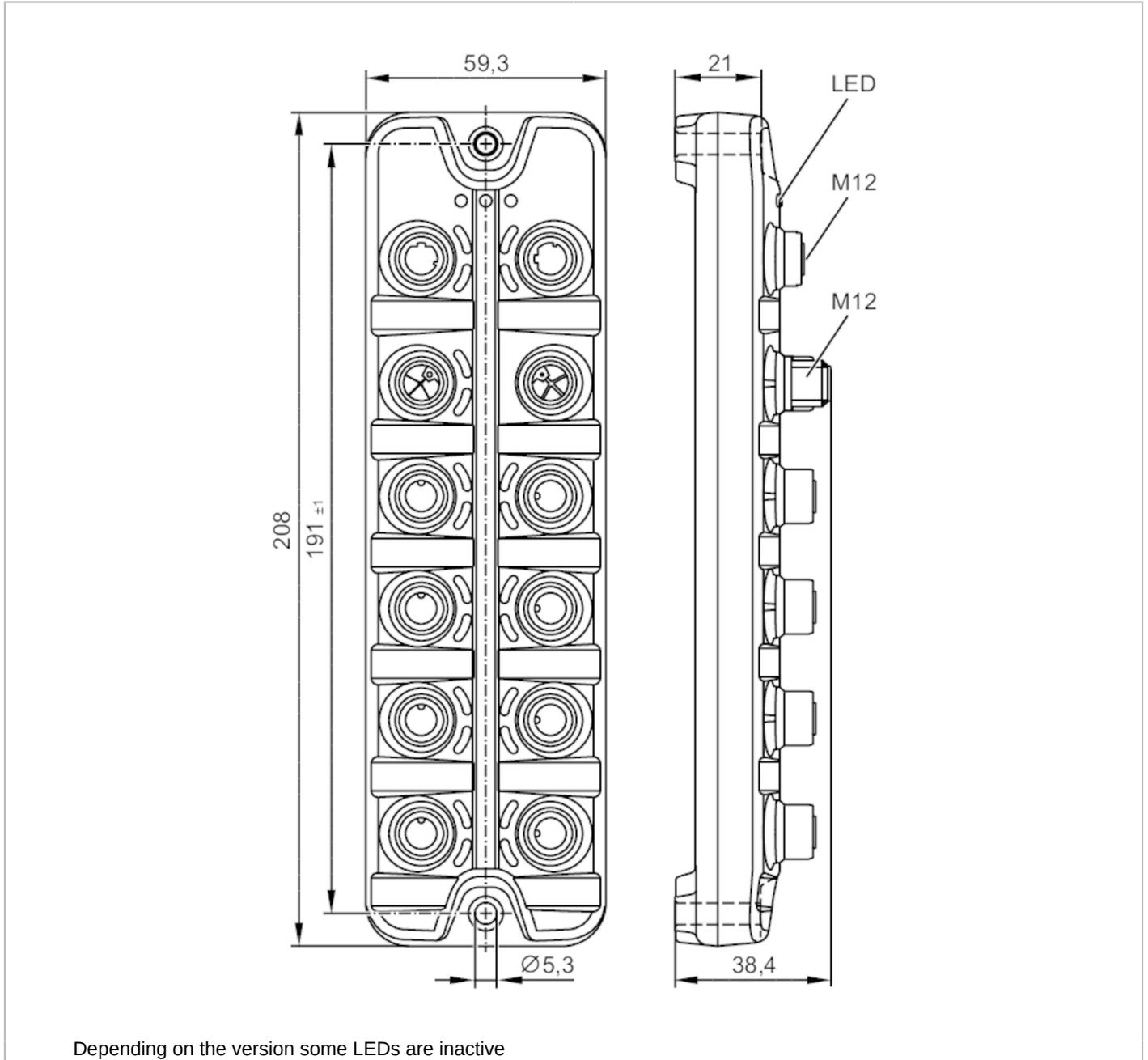


AL4102



Ethernet module with PROFINET interface

ETH Module PFL PN 16DI IP67



Depending on the version some LEDs are inactive



Application	
Application	I/O modules for field applications
Daisy-chain function	power supply; fieldbus interface
Electrical data	
Operating voltage [V]	20...30 DC; (US ; to SELV/PELV)
Current consumption [mA]	200...3900; (cULus: 200 ... 3500; US)
Protection class	III
Max. current load total [A]	3.6
Overall current rating (UL) [A]	3.2



Ethernet module with PROFINET interface

ETH Module PFL PN 16DI IP67

Inputs / outputs		
Number of inputs and outputs	Number of digital inputs: 16	
Inputs		
Number of digital inputs	16; (type 2 according to IEC 61131-2)	
Switching level high [V]	11...30	
Switching level low [V]	0...5	
Digital inputs protected against short circuits	yes	
Software / programming		
Parameter setting options	counter function	
Functions and parameters	function	CTU (Up Counter), CTD (Down Counter), CTUD (Up-Down Counter), CTDIR (Direction Counter)
	number	8 (1 counter for each port)
	count frequency	4500 Hz
	main counter	32 Bit (0...4.294.967.295)
	batch counter	16 Bit (0...65.535)
Interfaces		
Communication interface	Ethernet	
Ethernet - PROFINET		
Transmission standard	100Base-TX	
Transmission rate	100 MBit/s	
Protocol	PROFINET	
Factory settings	IP address: 0.0.0.0	
	subnet mask: 0.0.0.0	
	gateway IP address: 0.0.0.0	
	MAC address: see type label	
Note on interfaces	CC-C (Conformance Class C) (IRT-Switch)	
	S2 redundancy	
	Netload Class III	
	CiR (Configuration in Run)	
	SNMP (Simple Network Management Protocol)	
	MRP (Media Redundancy Protocol)	
	Supported network topologies: line	
	ring	
Operating conditions		
Ambient temperature [°C]	-25...60	
Storage temperature [°C]	-25...85	
Max. relative air humidity [%]	90	
Protection	IP 65; IP 66; IP 67	
Protection rating (NEMA 250)	6P	
Pollution degree	2	
Chemical media	ISO 16750-5	AA, BA, BD, HLP, CC, DB, DC, DD, CA
	NEMA 250 5.13.1	AA



Ethernet module with PROFINET interface

ETH Module PFL PN 16DI IP67

Tests / approvals		
EMC		EN 61000-6-2
		EN 61000-6-4
Shock resistance		DIN EN 60068-2-27
Vibration resistance		DIN EN 60068-2-64 2009-04
		DIN EN 60068-2-6 2008-10
MTTF	[years]	129

Mechanical data		
Weight	[g]	424.4
Housing		rectangular
Type of mounting		backplane mounting
Dimensions	[mm]	208 x 59.3 x 38.4
Materials		housing: PA orange; socket: brass nickel-plated
Sealing material		FKM

Remarks		
Remarks		For further information please see the operating instructions.
Pack quantity		1 pcs.

Electrical connection - Ethernet

Connector: M12; coding: D; Sealing: FKM

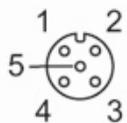


IN / OUT XF1, XF2

1	TX +
2	RX +
3	TX -
4	RX -
5	not used

Electrical connection - inputs / outputs

Connector: M12; coding: A; Sealing: FKM





Ethernet module with PROFINET interface

ETH Module PFL PN 16DI IP67

Digital Input X1...X8

1	Sensor supply (US) L +
2	digital input 2
3	Sensor supply (US) L-
4	digital input 1
5	functional earth

Electrical connection - power supply IN

Connector: M12; coding: L



XD1

1	+ 24 V DC (US) brown
2	GND (UA) white
3	GND (US) blue
4	+ 24 V DC (UA) black
5	FE grey

Electrical connection - power supply OUT

Connector: M12; coding: L; Sealing: FKM



XD2

1	+ 24 V DC (US) brown
2	GND (UA) white
3	GND (US) blue
4	+ 24 V DC (UA) black
5	FE grey