FEATURE HIGHLIGHTS

- 5 10/100/1000 BASE-T(X) ports, M12 connector (A or X coding)
- EN50155, EN50121-4 and UL 61010-2-201 certified
- Redundant power input 12~48 VDC
- Ruggedized IP67 aluminum case design
- Works from -40°C~75°C
- Prioritizes Profinet packets according to 802.1q

PRODUCT DESCRIPTION

EMG8305 is a rugged 5 port IP67-rated Unmanaged Ethernet switch with five 10/100/1000BASE-T(X) M12 ports, suitable and certified for railway applications. Its modern, slim and flat design makes the device installation possible on virtually any surface without requiring large areas.

It provides resistance towards dust, dirt, liquid, and vibration making it suitable for the toughest industrial applications even without the need of additional housing. Its operating temperature ranges from -40°C to 75°C.

EMG8305 Unmanaged Switch is compliant with the essential sections of EN 50155, covering operating temperature, power input voltage, EMC and vibration. Its UL61010-2-101 certification confirms the device's reliability, safety and performance.

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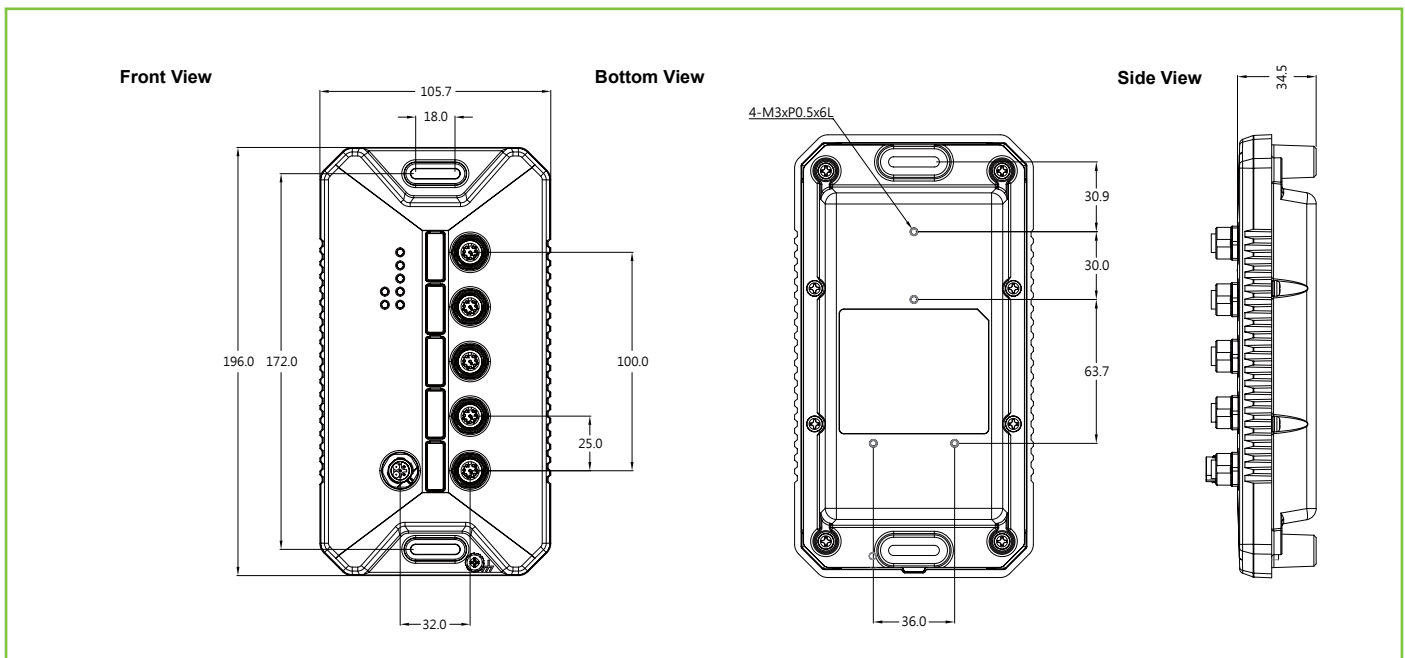+ 886 - 3 - 5508131

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EN50155
EN50121-4

c UL LISTED

CE

FC

RoHS COMPLIANT

v: 1.0

SPECIFICATIONS

Technical Specifications	
Model Name	EMG8305
Switch Properties	
Processing Scheme MAC Address Table Packet Buffer Size Jumbo Frame	Store-and-Forward 8096 1Mbits 10k Bytes
Ethernet	
Compliance	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT IEEE 802.3x for Flow Control, back pressure flow control
Transmission Rate	10/100/1000 Mbps
Flow Control	Back pressure and pause frame - based flow control schemes
Power	
Input Voltage Input Current Max Power Consumption Connector Reverse Polarity Protection	12-48 VDC 0.42A @ 12 V 5W 5-Pin A-Code Male M12 Yes
LED	
Indicators	PWR1, PWR2, LAN1, LAN2, LAN3, LAN4, LAN5
Physical Characteristics	
Housing	IP67 protection according to EN 60529, Aluminum Housing
Dimension (W x H x D) (mm) Weight Installation	105.7 x 196 x 48.3 mm 650 g Wall-mount (Optional Din-Rail Kit)
Environmental limits	
Operating Temperature Storage Temperature Ambient Relative Humidity	-40°C~75°C (-40°F~167°F) -40°C~85°C (-40°F~185°F) 5%~95%, 55°C (Non-condensing)

REGULATORY APPROVALS

Regulatory Approvals	
Safety	UL/IEC/EN 61010-1, UL/IEC(CB) 61010-2-201
Rail Traffic	EN50155; EN50121-4
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4

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Test	Item		Value	Level
IEC 61000-4-2	ESD	Contact Discharge Air Discharge	±8KV ±15KV	4 4
IEC 61000-4-3	RS	80-1000MHz 1.4-2.1GHz 2.1-2.7GHz	20(V/m) 10(V/m) 5(V/m)	3 3 3
IEC 61000-4-4	EFT	DC Power Port Signal Port	±4.0KV ±2.0KV	3 3
IEC 61000-4-5	Surge	DC Power Port DC Power Port Signal Port	Line-to Line±1.0 kV Line-to Earth±2.0 kV Line-to Earth±2.0 kV	3 3 3
IEC 61000-4-6	CS	0.15-80MHz	10V rms	3
IEC 61000-4-8	PFMF	(Enclosure)	300A/m	3
RoHS2	Yes			
MTBF	32.70 Years (according to MIL-HDBK-217F)			
Warranty	5 years			

DIMENSIONS & LAYOUT

Front View

105.7
18.0
196.0 172.0
100.0
25.0
32.0

Bottom View

4-M3xP0.5x6L
30.9
30.0
63.7
36.0

Side View

34.5

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ORDERING INFORMATION

Ordering information

Model name	Part Number	M12 Ports	M12 Type
EMG8305-M12-A	1P1EMG8305A001G	5	A coding
EMG8305-M12-X	1P1EMG8305X001G	5	X coding

Optional Accessories

Model name	Part Number	Description
DIN-Rail Kit	70100000000062G	DIN Rail accessories with screw
M12 Sealing Cap (Plast)	3990079G	Plastic sealing cap for unoccupied M12 plugs (1560251)
M12 Sealing Cap (metal)	59908571G	Metal sealing cap for unoccupied M12 plugs (1430488)
M12 screw plug (Plast)	3990078G	Plastic Screw Locking for unoccupied M12 sockets (1553129)
M12 screw plug(metal)	59908561G	Metal Screw Locking for unoccupied M12 sockets (1503302)

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