

Data sheet

SM 021 - Digital input (021-1SD10)

Technical data

Order no.	021-1SD10
Type	SM 021 - Digital input
Module ID	0C42 9E00
General information	
Note	-
Features	4x SDI DC 24 V Safety / FSoE
Current consumption/power loss	
Current consumption from backplane bus	95 mA
Power loss	0.8 W
Technical data digital inputs	
Number of inputs	4
Cable length, shielded	330 m
Cable length, unshielded	330 m
Rated load voltage	-
Current consumption from load voltage L+ (without load)	2 mA
Rated value	DC 20.4...28.8 V
Input voltage for signal "0"	DC 0...5 V
Input voltage for signal "1"	DC 11...28.8 V
Input voltage hysteresis	-
Signal logic input	Sinking input
Frequency range	-
Input resistance	-
Input capacitance	100 nF
Input current for signal "1"	3 mA
Connection of Two-Wire-BEROs possible	yes
Max. permissible BERO quiescent current	1.5 mA
Input delay of "0" to "1"	parameterizable 1ms - 1s
Input delay of "1" to "0"	parameterizable 1ms - 1s
Number of simultaneously utilizable inputs horizontal configuration	4
Number of simultaneously utilizable inputs vertical configuration	4
Input characteristic curve	IEC 61131-2, type 3
Initial data size	4 Bit
Status information, alarms, diagnostics	
Status display	green LED per channel
Interrupts	yes, parameterizable
Process alarm	no
Diagnostic interrupt	yes, parameterizable
Diagnostic functions	yes, parameterizable
Diagnostics information read-out	possible
Module state	green LED

Module error display	red LED
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Channel error display	red ERR-LED and yellow ER2-LED
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Isolation

Between channels	-
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Between channels of groups to	-
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Between channels and backplane bus	yes
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Insulation tested with	DC 500 V
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Safety

Safety protocol	FSoE
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Safety requirements	SIL CL 3, PL e, Kat 4
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Secure user address	1 - 4095
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Watchdog	parameterizable 20ms - 65s
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Two channels	Each 2 of 4 inputs switchable
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Test pulse outputs	4
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Datasizes

Input bytes	6
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Output bytes	6
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Parameter bytes	16
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Diagnostic bytes	20
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Housing

Material	PC / PPE GF10
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Mounting	Profile rail 35 mm
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Mechanical data

Dimensions (WxHxD)	12.9 mm x 109 mm x 76.5 mm
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Net weight	63 g
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Weight including accessories	68 g
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Gross weight	84 g
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Environmental conditions

Operating temperature	0 °C to 60 °C
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Storage temperature	-25 °C to 70 °C
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Certifications

UL certification	in preparation
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KC certification	in preparation
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