

AS-i Safety 8I/1O Module

AS-i Safety Module with 8 x 2 channel safe inputs
and 1 fast electronic safe output

Optimal costs for safe in- and outputs on AS-i

Maximum number of safe inputs at 22.5 mm cabinet width,

optimized for service and commissioning

Protection category IP20



ASIO-8SI-1SO-S

Technical realization:

- It may be less signals are processed. The module uses only the necessary AS-i addresses.
- If the safety input S3 is not needed, the protection feedback can optionally connected on S3. The transfer occurs as usual on the diagnostic slave of the safety AS-i outputs.
- No limitation of cable length at safety inputs (the maximum loop resistance is 150Ω).
- 16 / 8 safe inputs for floating contacts or optoelectronic protective devices.

Diagnosis and commissioning:

- LED displays according to other Safety Slaves or to the Monitor.
- Simple configuration via software ASIMON or selection of AS-i Slaves with the help of two rotary switches or addressing.
- Chip card for the simple exchange.
- Fixed Safety Code series for each AS-i address. Each module generates by same address programming same code series.

Article no.	ASIO-8SI-1SO-S
Connection	COMBICON clamp
Length of connector cable	unlimited ¹
AS-i	
Profile	safety input slaves: S-0.B.F.0 diagnostic slaves: S-7.A.5.E configuration slave: S-7.A.F.5
Voltage	18 ... 31,6 V
Max. current consumption	200 mA
Max. continuous operating current	125 mA
AUX	
Voltage	20 ... 30 V (PELV)
Max. current consumption	1 A max.
Input	
Number	16 / 8 safe inputs for floating contacts or optoelectronic protective devices switching current statical 4 mA at 24 V, dynamic 15 mA at 24 V (T=100 μs)
Supply voltage	out of 24 V auxiliary power
Input level	10 mA, R < 150 Ω
Output	
Number	1 (2) output switching elements (semiconductor) max. contact load: 0,7 A DC-13 at 24 V
Supply voltage	out of 24 V auxiliary power
Max. output current for OSSD supply	0,7 A
Test pulse	when output is switched on minimal distance between 2 test pulses: 250 ms, pulse length to 1 ms

Article no.	ASIO-8SI-1SO-S
Display	
LEDs S1 ... Sn (yellow)	state of inputs S1 ... S16
LED PWR (green)	AS-i power
LED FAULT/FLT (red)	AS-i error LED
LED O1 (yellow)	output 1 has switched
LED AUX (red)	24 V DC AUX
Display	
Applied standards	IEC 61508:2010 EN 62061:2005/A1:2013 EN ISO 13849-1:2008/AC:2009
Storage temperature	0 °C ... +55 °C
Operating temperature	-25 °C ... +85 °C
Housing	plastic, for DIN-rail mounting
Protection class (EN 60529)	IP20
Tolerable loading referring to humidity	according to EN 61131-2
Isolation voltage	≥ 500 V
Weight	160 g
Dimensions (W / H / D in mm)	22,5 / 99 / 114,5

1. loop resistance ≤ 150 Ω

	Clamps	Description
	S1, S2, S3, S4	safety input terminal input 1-4
	S5, S6, S7, S8	safety input terminal input 5-8
	S9, S10, S11, S12	safety input terminal input 9-12
	S13, S14, S15, S16	safety input terminal input 13-16
	1.14 _{ext.out}	semiconductor output 1
	T1	pulse 1 (S1, S3, S5, S7, S9, S11, S13, S15)
	T2	pulse 2 (S2, S4, S6, S8, S10, S12, S14, S16)
	0 V _{ext.out}	mass connection for semiconductor output
	AS-i+, AS-i-	connection to the AS-i-Bus
	ADDR	address socket
	AUX+ _{ext.in} AUX- _{ext.in}	power supply input

Addressing			SEL1	SEL2	Description
0	0	RUN, without configuration slave			
E	E	RUN, with configuration slave			
1	1	addressing safety input 1, contacts	5	1	addressing safety input 1, OSSD
2	2	addressing safety input 2, contacts	6	2	addressing safety input 2, OSSD
3	3	addressing safety input 3, contacts	7	3	addressing safety input 3, OSSD
4	4	addressing safety input 4, contacts	8	4	addressing safety input 4, OSSD
5	5	addressing safety input 5, contacts	9	5	addressing safety input 5, OSSD
6	6	addressing safety input 6, contacts	A	6	addressing safety input 6, OSSD
7	7	addressing safety input 7, contacts	B	7	addressing safety input 7, OSSD
8	8	addressing safety input 8, contacts	C	8	addressing safety input 8, OSSD
9	9	addressing safety output 1			
A	A	addressing safety output 1, diagnostic			
D	D	reset to factory defaults			