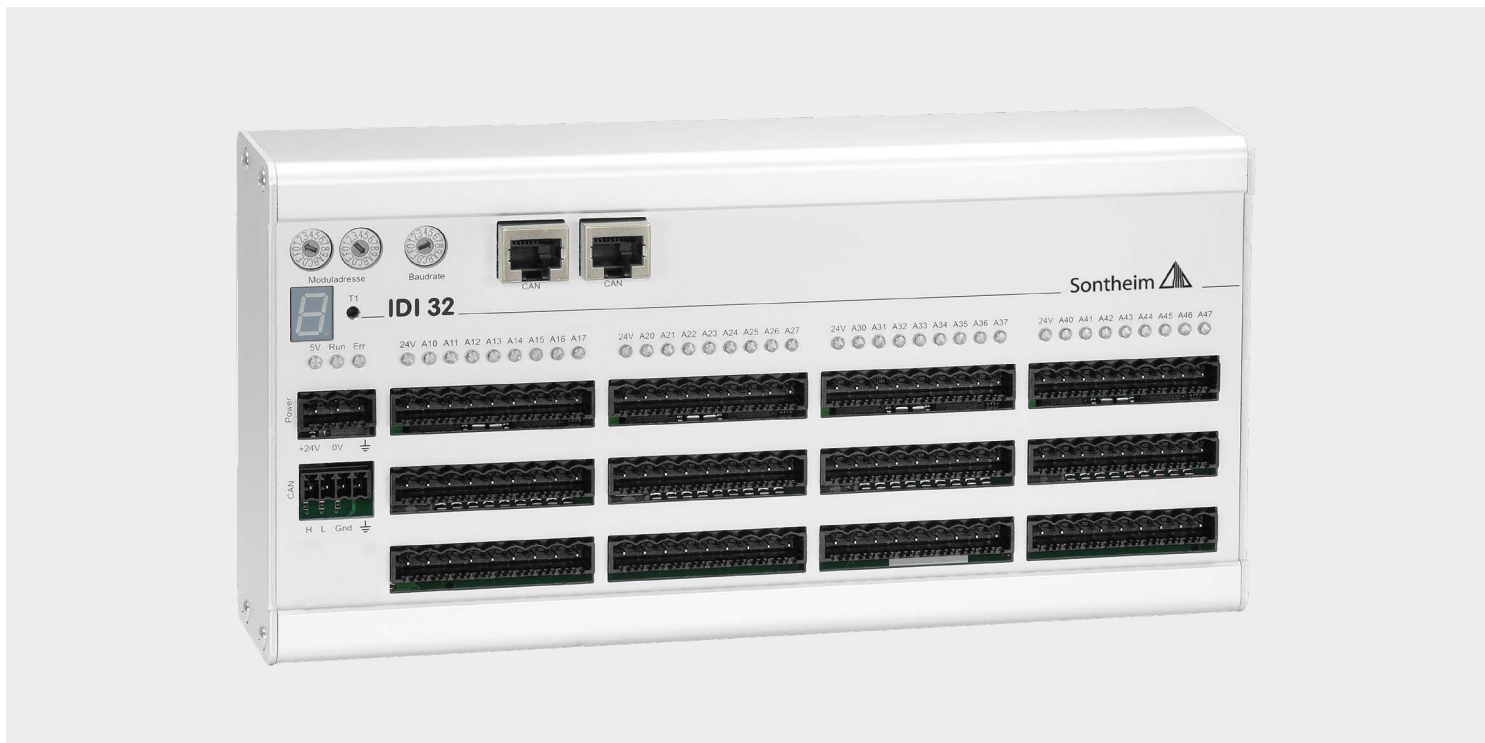


IDX 32

Digital 24 V input modul with short conversion times





IDX 32

IDI32 is a digital 32-channel 24 V input module for the use in CAN networks. The device possesses the shortest conversion times and a high process reliability. That makes it the best choice for continuous operation in complex machine networks.

Key Features



Safety features for high running safety



Galv. isolated CAN interface acc. to ISO 11898



Easy access to all interfaces



Own intelligence for complex CAN networks



Signal delay of less than 400 µs



Galv. isolated inputs



Compact aluminium housing with IP20 and integrated top hat rail mounting

Clamps and cabling

A very important feature of the IDI32 in its different versions is the really sturdy way in which the connection of actors and sensors is handled. 24 V, data and GND have separate connectors (3-wire-connection). We use phoenix clamps for simple and rugged connections. Every IO-block of the device is galvanically isolated and has its own power supply. Thus, all IDxx modules can be used in safety-relevant environments. An example for a typical application is the CAN handling of emergency-stop circuits like guard doors.

CAN interface

Two RJ45 connectors at the front cover facilitate the connection with other CAN participants over ethernet patch cable. The IDI32 can also be used in a decentralised CAN network.

LEDs and switches

All inputs and outputs can be monitored with the help of LEDs at the clamps. In addition to that, you can configure the baud rate and module address with HEX switches at the front cover – easy and comfortable.

Technical Data

Hardware	IDI32	IDO32	IDIO32
CPU	16-bit microcontroller		
CAN	Galvanically isolated acc. to ISO 11898, connection via two RJ45 connectors (bridged)		
CAN protocol	DS 301 and 401		
Number of modules/bus	127		
Setting	of module address via 2 HEX-switches of baud rate via HEX-switch		
Connection system	Spring connection clamping range 0,25 – 1,5 mm ² , solid wire „e“, fine wire „f“ 0,25 – 1,5 mm ² , „f“ with wire end ferrule, without plastic collar 0,25 – 1,5 mm ²		
Connection technology	Two-wire and three-wire connection, stripping length 10 mm		
Operating status display	1x LED green for power supply (5V) 1x LED green for operation mode (Run) 1x LED red for error status (Err) 32x LED green for set inputs	1x LED green for power supply (5V) 1x LED green for operation mode (Run) 1x LED red for error status (Err) 32x LED green for set outputs (at the clamp)	1x LED green for power supply (5V) 1x LED green for operation mode (Run) 1x LED red for error status (Err) 16x LED green for set inputs 16x LED green for set outputs (at the clamp)
Dimensions (l×w×h)	241 mm × 120 mm × 48 mm		
Weight	850 g		
Protection class	IP 20, EMC-requirements acc. to CE		
Operating temperature	0°C up to +60 °C		
Storage temperature	–30 °C up to +70 °C		
Humidity	90 % non-condensing		
Power supply	24 V DC ±20 %		
All inputs/outputs active, incl. LEDs	400 mA		470 mA

Digital inputs	IDI32	IDO32	IDIO32
Number of inputs	32	–	16
Switching level "1"	+15.0 V up to +28.8 V DC	–	+15.0 V up to +28.8 V DC
Switching level "0"	0.0 V up to +8.0 V DC	–	0.0 V up to +8.0 V DC
Potential isolation	Optocoupler	–	Optocoupler
Input current/input	11 mA	–	11 mA
Sampling frequency (Fg)	2.5 kHz	–	2.5 kHz
Signal delay	< 400 µs	–	< 400 µs

Digital outputs	IDI32	IDO32	IDIO32
Number of outputs	–	32	16
Power	–	24 V DC ±20 %	
Circuit type	–	FET-Highside-Switch	
Potential isolation	–	Optocoupler	
Output current/output	–	1 A (short circuit proof)	
Total current of the Module	–	8 A	
Total current of the Module with blockwise supply	–	16 A	
Switching frequency	–	1 kHz	
Freewheel diodes	–	Yes, controlled inductors require external freewheel diodes	
Signal delay	–	< 100 µs	

Pin assignment



9-pole phoenix clamp

Top connector 24V	
1	24V
2	Input 1 / Output 1
3	Input 2 / Output 2
4	Input 3 / Output 3
5	Input 4 / Output 4
6	Input 5 / Output 5
7	Input 6 / Output 6
8	Input 7 / Output 7
Bottom connector 0V	



CAN RJ 45

1	–
2	–
3	–
4	CAN low
5	CAN high
6	–
7	CAN GND
8	–



HEX-Switches module address

Minimum 01 HEX	1
Maximum 7F HEX	127



HEX-Switch baudrate

0	10
1	20
2	50
3	125
4	250
5	500
6	800
7	1000

Order information

V966116000	IDI32
V966126000	IDO32
V966128000	IDIO32



Mobile Automation



Industrial Automation



Diagnostics



Connectivity

We are looking forward to your enquiry!

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