

16 CH Digital Input Module-CANopen Slave

Technical details

# CAN-DI16



- CANopen Slave
- Conforms to CiA Draft Standards DS301 - Version 4.0 and DS401 Version 2.0
- Nodeguarding, Lifeguarding, Heartbeat
- 16 Channel Digital Input (2 groups of 8 channel Sink/Source)
- Isolated between logic and Inputs
- LED indication for each input status, communication and power
- DIN rail mount assembly
- DIP switch for CANopen slave configuration
- No configuration software needed
- CE Mark\*

Unit Specifications		
Device Type	Industrial Automation & Control Device	
Main Supply	Voltage (typical)	24VDC
	Voltage Range	18-30 VDC
	Connection Type	Pluggable Terminal Connector
Communication Interface & Protocol	CAN & CANopen Slave	
IP Level	IP20	
Operating Temperature	0 to 70°C	
Storage Temperature	-25 °C to +75°C	
Ambient Humidity	5 to 95% RH (no condensation)	
Mounting	DIN rail	
Module Dimension	87.7 x 90.2 x 32	
Protection	Against surge voltages	
Certification	CE*	
Operation Indicator	LED (RED) for DC power ON, Yellow LED to indicate STATUS, GREEN LEDS to indicates I/O status	
Digital Input Specs: 16 pt. 24 VDC Input		
No. of Digital Inputs	16 (Sink/source) two group (Expandable to add up to 16 DI or 16 DO)	
Max. Input Current	6mA	
Input Update Time Normal Mode	2ms	
Input Logic '0' Volt	0-5V	

**Messung Systems Pvt. Ltd.**

501 Lunkad Sky Vista, Viman Nagar, Pune 411 014, India.

T: +91 20 6649 2800 | e: [info@messung.com](mailto:info@messung.com) | w: [www.messung.com](http://www.messung.com)

Input Logic '1' Volt	12-28V
Filter Time for Input	Default 5 ms
Input Pulse Catch	User selectable for individual input
Isolation	Isolation between I/O and Logic

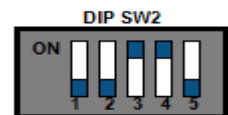
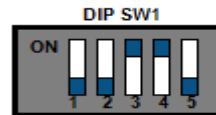
\*in process

CANopen Specifications	
NMT	Slave
Error Control	Node guarding
Node ID	1 to 127 (Through DIP Switches)
Baud Rate	Manual configuration (20, 50, 125, 250, 500, 800, 1000 Kbps)
Terminal Resistor	120 ohms (configurable)
No. of PDOs	One TPDO & One RPDO
PDO Transmission Modes	Synchronous, asynchronous, event driven, cyclic, acyclic and remote frame dependent
PDO Mapping	Dynamic PDO mapping
No. of SDOs	One Server SDO
CANopen Version	CIA standard DS 301 version 4.0
Device Profile	CIA standard DS 401 version 2.0
Certification from CIA	No
CAN Transceiver & Physical Layer	ISO 11898

## CANopenSlave Configuration DIP switch

### Steps:

1. Switch S1-7 for address and switch S8-10 for baud rate
2. Adjust the DIP switch according to requirements. Refer below image.



SWITCH 1 -7							
NODE ID Configuration							
NODE ID	Switch1	Switch2	Switch3	Switch4	Switch5	Switch6	Switch7
Programmable ID	OFF	OFF	OFF	OFF	OFF	OFF	OFF
1	ON	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF
...	...	...	...	...	...	...	...
127	ON	ON	ON	ON	ON	ON	ON

SWITCH 8 -10			
Baud Rate Configuration			
BAUD RATE	Switch8	Switch9	Switch10
1 Mbit/sec	OFF	OFF	OFF
800 Kbit/sec	ON	OFF	OFF
500 Kbit/sec	OFF	ON	OFF
250 Kbit/sec	ON	ON	OFF
125 Kbit/sec	OFF	OFF	ON
50 Kbit/sec	ON	OFF	ON
20 Kbit/sec	OFF	ON	ON
SWITCH 11			
TERMINATION 120 OHM			

### Messung Systems Pvt. Ltd.

501 Lunkad Sky Vista, Viman Nagar, Pune 411 014, India.

T: +91 20 6649 2800 | e: [info@messung.com](mailto:info@messung.com) | w: [www.messung.com](http://www.messung.com)

Supported Expansion Module	
<i>Model No.</i>	<i>Description</i>
<b>CAN-DI16-E</b>	16 CH Digital Input
<b>OR</b>	
<b>CAN-DO16-E</b>	16 CH Digital Output (Relay)

### SAFETY INSTRUCTIONS

- Installation should only be performed by qualified professionals according to the laws and regulations.
- Do not connect the mains voltage nor any other external voltage to any point of the CAN connector; it would represent a risk for the entire system. The facility must have enough insulation between the mains (or auxiliary) voltage and the Modbus or the wires of other accessories, in case of being installed.
- Keep the device away from water and do not cover it with clothes, paper or any other material while in use.

