# CAN-DO16

- CANopen Slave
- Conforms to CiA Draft Standards DS301 - Version 4.0 and DS401 Version 2.0
- Nodeguarding, Lifeguarding, Heartbeat
- 16 Channel digital output channels (relay) (2 groups of 8 channel)
- Isolated between logic and outputs
- LED indication for each output status, communication and power
- DIN rail mount assembly
- DIP switch for CANopen slave configuration
- No configuration software needed
- CE Mark*

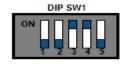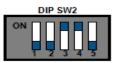| Unit Specifications | | |
|---|---|---|
| Device Type | Industrial Automation & Control Device | |
| Main Supply | Voltage (typical) | 24VDC |
| | Voltage Range | 18-30 VDC |
| | Connection Type | Pluggable Terminal Connector |
| Communication Interface & Protocol | CAN & CANopen Slave | |
| IP Level | 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 output Spec: 16 pt. Relay Potential Free Output** | | |
| No.of Outputs | 16 (Expandable to add upto 16 DO or 16 DI) | |
| Voltage Rating | 24 to 250 VAC, 5-30 VDC | |
| Type of Output | Non latching normally open potential free relay contact | |
| Contact Rating | 1 Amp at 250 VAC (Resistive load) 1 Amp at 30 VDC (Resistive load) | |
| 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 and 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 Transreceiver & Physical Layer | ISO 11898 |

## CANopen Slave 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 Mbit/sec | ON | OFF | OFF |
| 500 Mbit/sec | OFF | ON | OFF |
| 250 Mbit/sec | ON | ON | OFF |
| 125 Mbit/sec | OFF | OFF | ON |
| 50 Mbit/sec | ON | OFF | ON |
| 20 Mbit/sec | OFF | ON | ON |
| SWITCH 11 | | |
| TERMINATION 120 OHM | | |

| Supported Expansion Module | |
|---|---|
| **Model No.** | **Description** |
| **CAN-DI16-E** | 16 CH Digital Input |
| **OR** | |
| **CAN-DO16-E** | 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.