

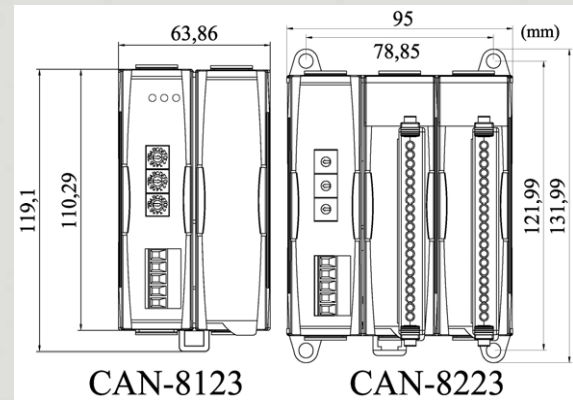


CANopen Series Products

CANopen Remote I/O Unit with 1/2 I/O Expansions



CAN-8123 / CAN-8223



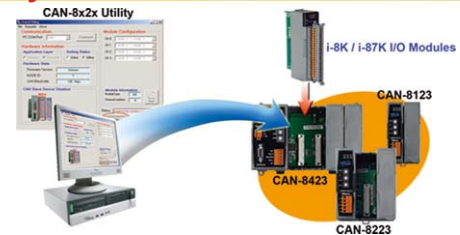
Dimensions

The CAN-8123/CAN-8223 main control unit are specially designed for the slave devices of CANopen protocol. It follows the CANopen Spec DS-301 V4.02 and DSP-401 V2.1, and supplies many features for users, such as dynamic PDO, EMCY object, error output value, SYNC cyclic and acyclic ... etc. The CAN-8123 and CAN-8223 supports 1 and 2 slots for I/O expansion and suits with a lot of ICP DAS DI / AI / DO / AO modules. User can choose DI/DO/AI/AO modules of I-87K series or I-8000 series to fit the customized practice applications. In addition, we also provide CAN-8x23 Utility to allow users to create the EDS file dynamically.

Features

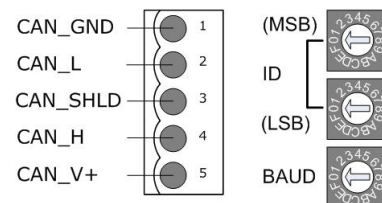
- NMT: Slave
- Error Control: Node Guarding/Heartbeat Producer
- No. of SDOs: 1 Server, 0 Client
- No. of PDOs: 16Rx, 16Tx
- PDO Modes: Event Triggered, Remotely requested, Cyclic and Acyclic SYNC
- Emergency Message available
- CANopen Version: DS-301 v4.02
- Device Profile: DSP-401 v2.1
- Produce EDS file Dynamically
- CAN, ERR, and Tx/Rx LED indicator
- Support Hot Swap and Auto-Configuration for high profile I-87K I/O modules

Utility Features



CAN-8x23 main unit can be plugged in the I-8K/I-87K IO modules to create a customized CANopen slave device and application. The CAN-8x23 Utility tool can configure the IO connection path, assembly and application objects information and create the EDS file of the device.

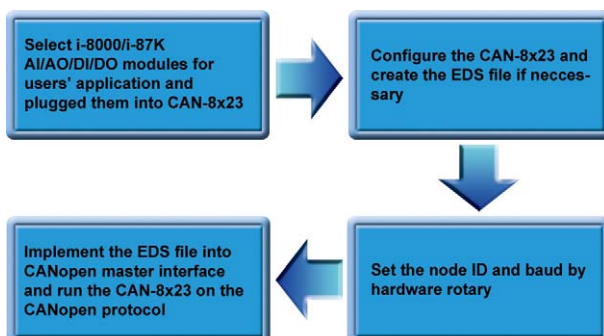
Pin Assignments



ID: Node ID Baud: Device Baud Rate

| Rotary Switch Value | Baud rate (K BPS) |
|---------------------|-------------------|
| 0 | 10 |
| 1 | 20 |
| 2 | 50 |
| 3 | 125 |
| 4 | 250 |
| 5 | 500 |
| 6 | 800 |
| 7 | 1000 |

Design Flowchart



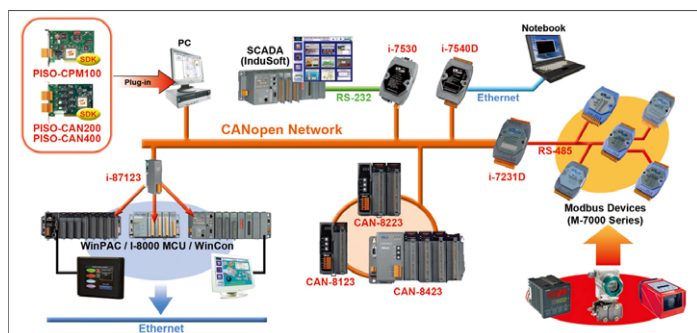
Hardware Specifications

| Model Name | CAN-8123 | CAN-8223 |
|---------------------------|---|---------------------------------|
| Hardware | | |
| CPU | 80186, 80 MHz or compatible | |
| SRAM/Flash/EEPROM | 512 KB / 512 KB / 2 KB | |
| NVRAM | 31 bytes (battery backup, data valid for up to 10 years) | |
| RTC (Real Time Clock) | Yes | |
| Watchdog | Watchdog IC | |
| Expansion Slot | 1 slot | 2 slots |
| CAN Interface | | |
| Controller | NXP SJA1000T with 16 MHz clock | |
| Transceiver | NXP 82C250 | |
| Connector | 5-pin screwed terminal block (GND, CAN_L, CAN_SHLD, CAN_H, V+) | |
| Baud Rate (bps) | 10 k, 20 k, 50 k, 125 k, 250 k, 500 k, 800 k, 1 M (By rotary switch) | |
| Transmission Distance (m) | Depend on baud rate (for example, max. 1000 m at 50 kbps) | |
| Isolation | 3000 V _{DC} for DC-to-DC, 2500 V _{rms} for photo-couple | |
| Terminal Resistor | Jumper for 120 Ω terminal resistor | |
| Specification | ISO-11898-2, CAN 2.0A | |
| Protocol | CANopen DS-301 ver4.02, DS-401 ver2.1 | |
| LED | | |
| Round LED | PWR LED, RUN LED, ERR LED | |
| Power | | |
| Power supply | Unregulated +10 ~ +30 V _{DC} | |
| Mechanism | | |
| Installation | DIN-Rail | DIN-Rail, Wall Mounting |
| Dimensions | 64mm x 119mm x 91mm (W x L x H) | 95mm x 132mm x 91mm (W x L x H) |
| Environment | | |
| Operating Temp. | -25 ~ 75 °C | |
| Storage Temp. | -30 ~ 80 °C | |
| Humidity | 10 ~ 90% RH, non-condensing | |

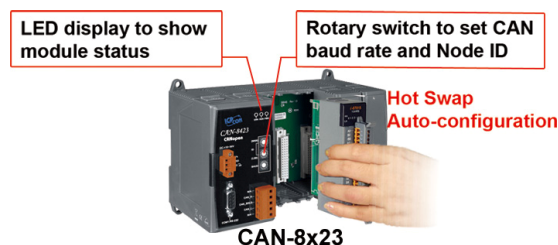
LED Indicators

| LED | Description |
|-----|--|
| PWR | Indicate the status of power supply |
| RUN | Indicates the status of the physical layer |
| ERR | Indicates the condition of the CANopen network state mechanism |

Application



Hot Swap & Auto-configuration



Ordering Information

| | |
|----------|---|
| CAN-8123 | CANopen Remote I/O Unit with 1 I/O Expansion |
| CAN-8223 | CANopen Remote I/O Unit with 2 I/O Expansions |