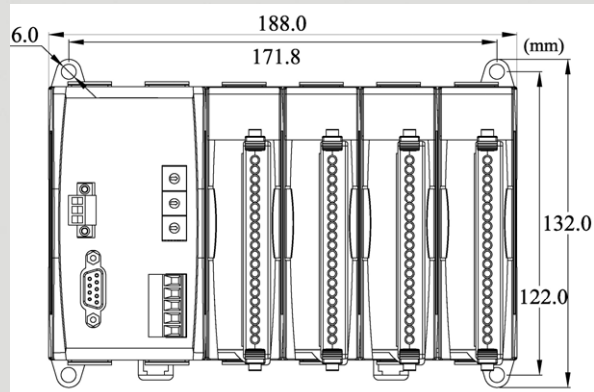# CANopen Series Products

CANopen Remote I/O Unit with 4 I/O Expansions

CE FC

CAN-8423

Dimensions

The CAN-8423 main control unit is specially designed for the slave device of CANopen protocol. It follows the CANopen Spec DS-301 V4.01 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-8423 supports up to 4 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: Heart beat to Node Guarding selectable
- 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 v4.01
- Device Profile: DSP-401 v2.0
- 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

Design Flowchart

Utility Features
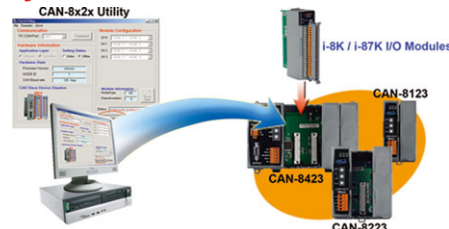
CAN-8423 main unit can be plugged in the I-8K/I-87K IO modules to create a customized CANopen slave device and application. The CAN-8x23 Utility tool can configure the IO connection path, assembly and application objects information and create the EDS file of the device.
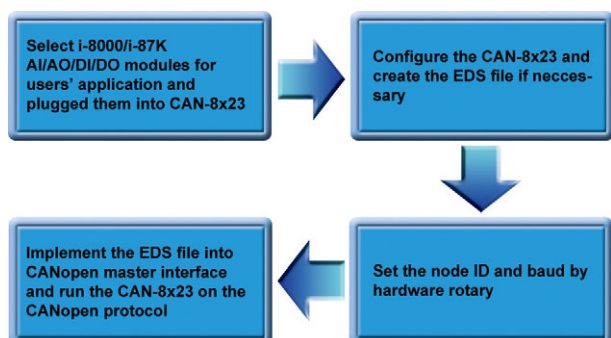
Pin Assignments
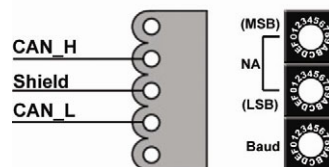
ID: Node ID   Baud: Device Baud Rate

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

Hardware Specifications

Item	CAN-8423
CPU	80186, 80MHz
SRAM	512K bytes
Flash Memory	512K bytes
EEPROM	2048 bytes (can be up to 128K bytes or change to 2K/8K FRAM)
NVRAM	32 bytes
Real Time Clock	16 bit; Year-2000 compliance; seconds, minutes, hours, date of the month; month, year, valid up from 1980 to 2079
Watch Dog Timer	CPU Built-in
COM 1	RS232 (Configuration port)
CAN Port	5-pin screw terminal connector
CAN Controller	Phillips SJA1000T CAN Controller
CAN Transceiver	Phillips 82C250 CAN Transceiver
CAN Protocol	CAN 2.0A/2.0B
Isolated	2500Vrms on CAN side
Terminal Resister	120Ω terminal resister selected by jumper
Transfer Rate	10K, 20K, 50K, 125K, 250K, 500K, 800K, 1M bps
I/O Expansion Slot	4 slots
Power Supply	20W unregulated +10Vdc to +30Vdc
Power Consumption	2.5 W
Operating Temp.	-25℃ to 75℃
Storage Temp.	-35℃ to 85℃
Humidity	5~95%
Dimensions	188mm x 91mm x 132mm (W x D x H)

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
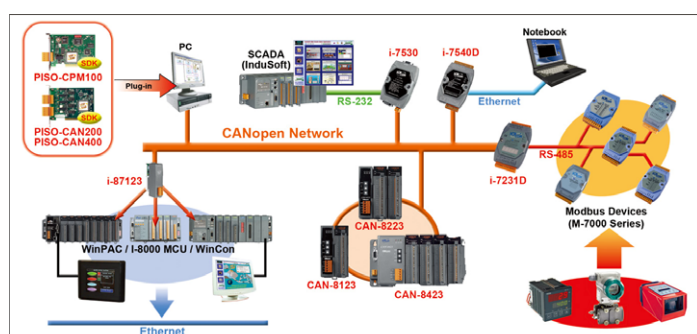
Hot Swap & Auto-configuration
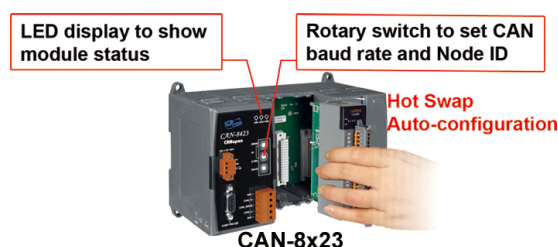
Ordering Information

CAN-8423	CANopen Embedded Device with 4 Expansions