

CAN-8823

CANopen Remote I/O Unit with 8 I/O Expansions

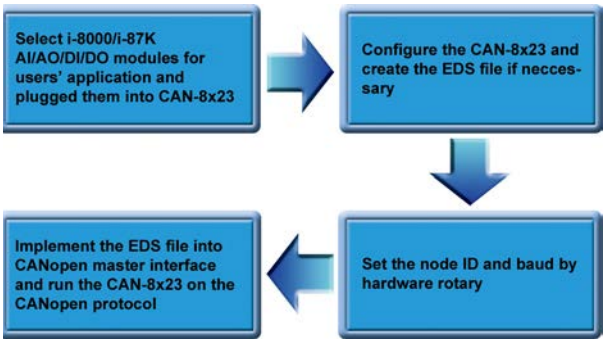
Features

- NMT: Slave
- Error Control: Node Guarding/Heartbeat Producer
- No. of PDOs: 16Rx, 16Tx
- PDO Modes: Event Triggered, RTD, Cyclic and Acyclic SYNC
- Emergency Message available
- CANopen Version: DS-301 v4.02
- Device Profile: CIA 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

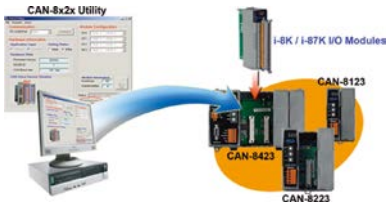
Introduction

The CAN-8823 main control unit is specially designed for the slave device of CANopen protocol. It follows the CANopen Spec CiA 301 V4.02 and CiA 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-8823 supports up to 8 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 High-profile 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.

Design Flowchart

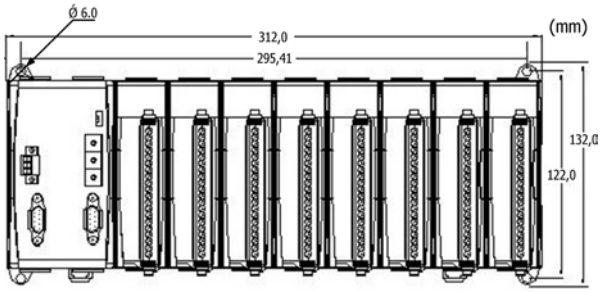


Utility Features

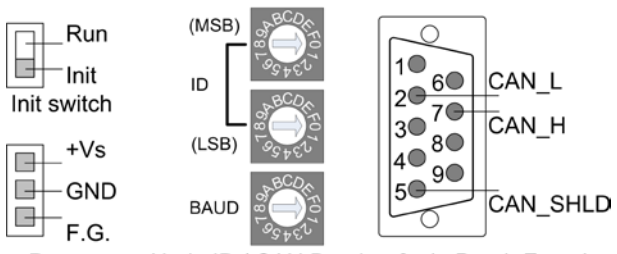


CAN-8x23 main unit can be plugged in the I-8K/I-87K IO modules to create a customized CANopen slave device and application. The CAN-8x23 Utility tool can configure the IO connection path, assembly and application objects information and create the EDS file of the device.

Dimensions



Pin Assignments



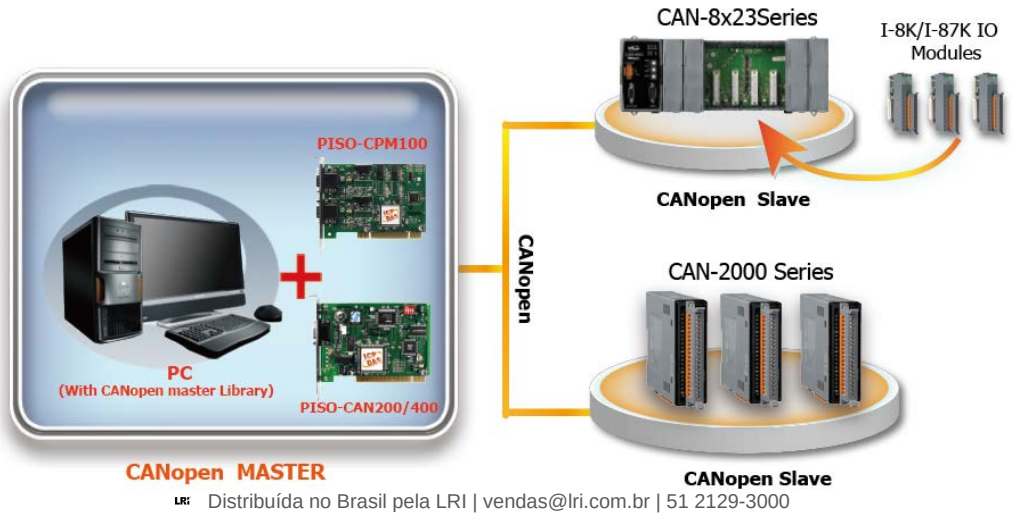
Baud Rotary Switch	CAN Baud Rate	Baud Rotary Switch	CAN Baud Rate
0	10 kbps	4	250 kbps
1	20 kbps	5	500 kbps
2	50 kbps	6	800 kbps
3	125 kbps	7	1000 kbps

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Specifications

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	8 slots
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP TJA1042
Connector	9-pin female D-Sub (CAN_L, CAN_SHLD, CAN_H, N/A for others)
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 Vrms for photo coupler
Terminal Resistor	Jumper for 120 Ω terminal resistor
Specification	ISO-11898-2, CAN 2.0A
Protocol	CANopen CiA 301 ver4.02, CiA 401 ver2.1
UART Interface	
COM 1	RS-232 (For configuration)
LED	
Round LED	PWR LED, RUN LED, ERR LED
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Mechanism	
Dimensions	312mm 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

Application



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Ordering Information

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