ICP DAS

DeviceNet Series Products

DeviceNet Remote I/O Unit with 4 Expansion Slots

CE FC


CAN-8424

Dimensions

188.0
171.8
6.0
132.0
122.0
(mm)
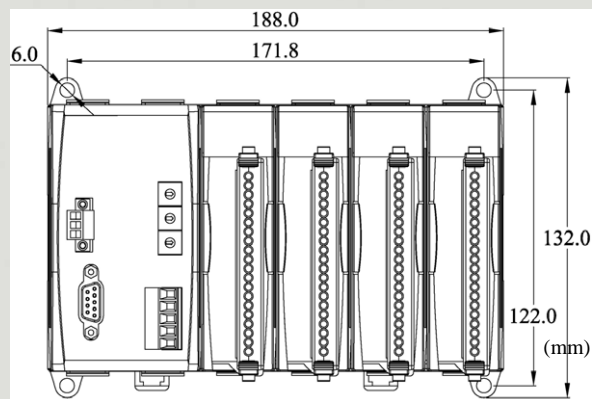
The CAN-8424 main unit based on the modular design offers many good features to the users and provides more flexibility in data acquisition and control system. In addition, ICP DAS also presents a CAN-8424 Utility tool to allow users to configure and create the EDS file for the specific IO modules plugged in. Therefore, users can easily apply the CAN-8424 in various DeviceNet network. In advance, the hot-swap function is provided with the high profile I-87K I/O modules for maintaining the system easily.

Features

- DeviceNet Version: Volume I & II, Release 2.0
- Number of Nodes: 64 max.
- Baud Rate: 125, 250, 500 kbps
- Support Message Groups: Predefined Master/Slave Connection set (Group 2 only Server)
- I/O Operating Modes: Poll, Bit-Strobe, Change of State / Cyclic
- Device Heartbeat & Shutdown Message
- Produce EDS file Dynamically
- No. of Fragment I/O: 128 Bytes max. (Input / Output)
- MAC ID Setting by Rotary Switch
- Baud Rate Setting by Rotary Switch
- Status LED: NET, MOD, PWR
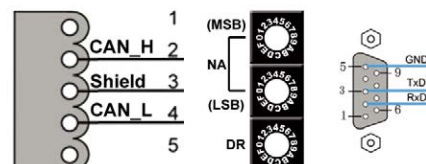- Support Hot Swap and Auto-Configuration for high profile I-87K I/O Modules
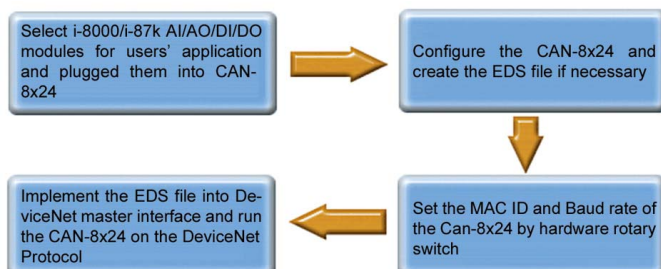
Utility Features
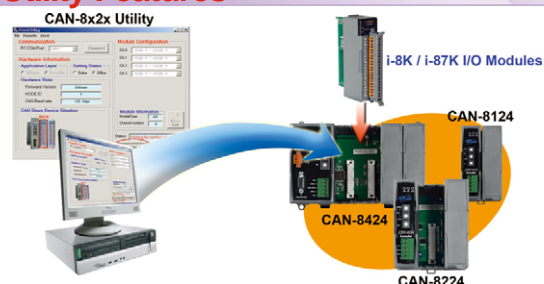
- Support I-8k/I-87K modules
- Show I/O modules configuration
- Show Application and assembly objects configuration
- Support IO connection path setting
- Support EDS file creating

Pin Assignments

Rotary Switch Value(DR)	Baud rate (kbps)
0	125
1	250
2	500

Design Flowchart

Select i-8000/i-87k AI/AO/DI/DO modules for users' application and plugged them into CAN-8x24

Configure the CAN-8x24 and create the EDS file if necessary

Set the MAC ID and Baud rate of the Can-8x24 by hardware rotary switch

Implement the EDS file into DeviceNet master interface and run the CAN-8x24 on the DeviceNet Protocol

Hardware Specifications

Hardware	
CPU	80186, 80 MHz or compatible
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB
NVRAM	31 bytes (battery backup, data valid for up to 10 years)
RTC (Real Time Clock)	Yes
Watchdog	Watchdog IC
Expansion Slot	4 slots
CAN Interface	
Controller	NXP SJA1000T with 16 MHz clock
Transceiver	NXP 82C250
Channel number	1
Connector	5-pin screwed terminal block (CAN_L, CAN_SHLD, CAN_H, N/A for others)
Baud Rate (bps)	125 k, 250 k, 500 k
Transmission Distance (m)	Depend on baud rate (for example, max. 500 m at 125 kbps)
Isolation	3000 V_{DC} for DC-to-DC, 2500 Vrms for photo-couple
Terminal Resistor	Jumper for 120 terminal resistor
Specification	ISO-11898-2, CAN 2.0
Protocol	DeviceNet Volumn I ver2.0, Volumn II ver2.0 Predefined Master/Slave Connection set
UART Interface	
COM 1	RS-232 (For configuration)
COM 1 Connector	9-pin male D-Sub (DTE: RxD, TxD, RTS, CTS, DTR, DSR, RI, GND)
LED	
Round LED	PWR LED, NET LED, MOD LED
Power	
Power supply	Unregulated +10 ~ +30 V_{DC}
Protection	Power reverse polarity protection, Over-voltage brown-out protection
Power Consumption	2.5 W
Mechanism	
Installation	DIN-Rail
Dimensions	188mm x 132mm x 91mm (W x L x H)
Environment	
Operating Temp.	-25 ~ 75 ℃
Storage Temp.	-30 ~ 80 ℃
Humidity	10 ~ 90% RH, non-condensing

LED Indicators

LED	Description
PWR	Indicate the status of power supply
MOD	Indicate the main or modules status
NET	This LED indicates the DeviceNet network status

Application
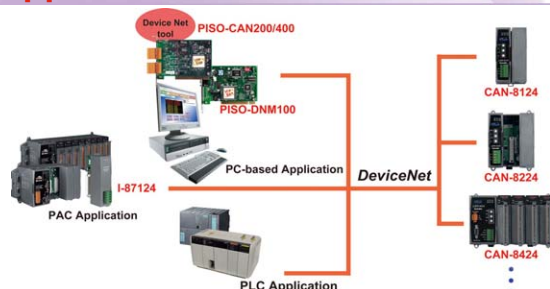
Hot Swap & Auto-configuration
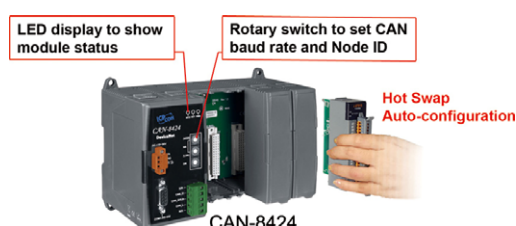
Ordering Information

CAN-8424-G	DeviceNet remote I/O unit with 4 empty slots