CAN-8424
DeviceNet Remote I/O Unit with 4 Expansion Slots

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
- Support Hot Swap and Auto-Configuration for high profile I-87K I/O Modules

Introduction

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.
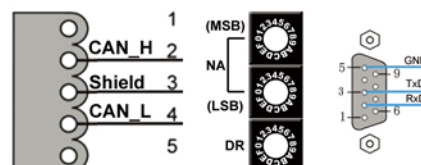
Utility Features
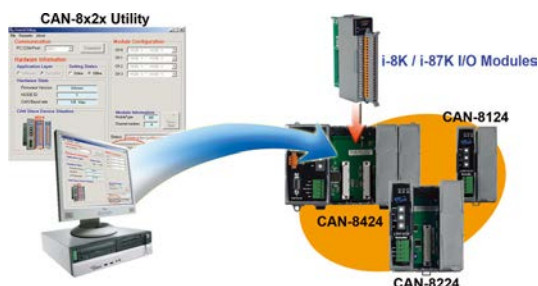
- Support I-8k/I-87K modules.
- Show I/O modules configuration.
- Show Application and assembly objects configuration.
- Support IO connection path setting
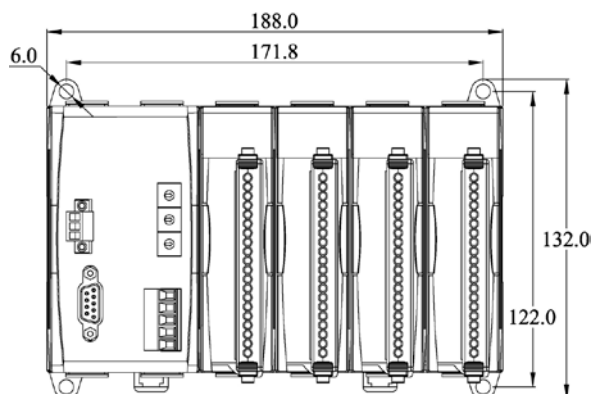- Support EDS file creating

Design Flowchart
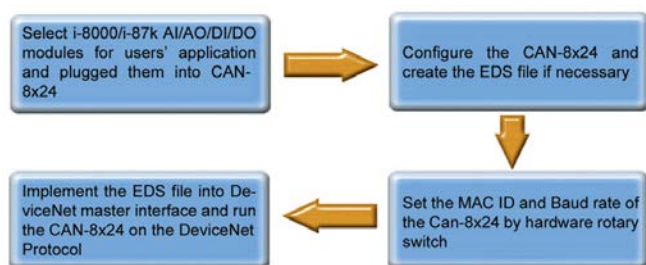
Pin Assignments


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

Dimensions (Units: mm)

▰ 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 Ω 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 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

▰ Application
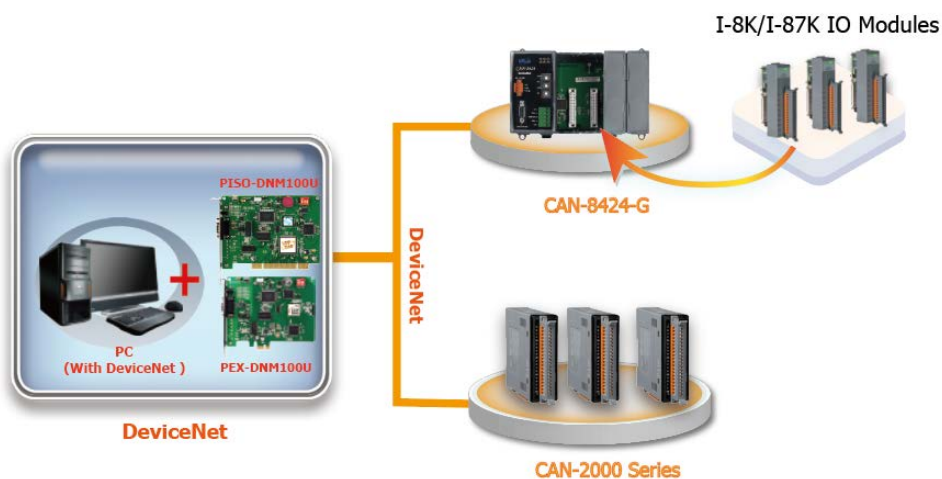
▰ Ordering Information

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