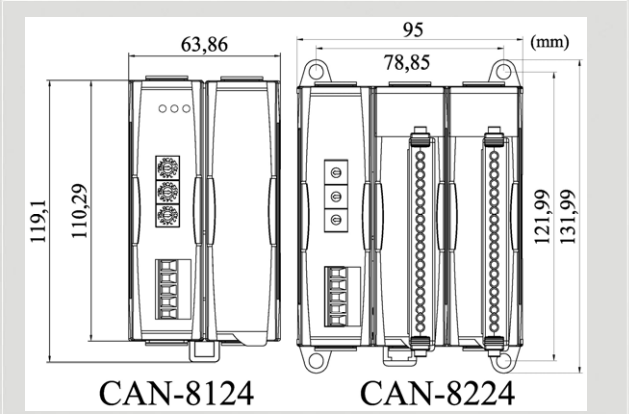
DeviceNet Series Products

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

CAN-8124 / CAN-8224



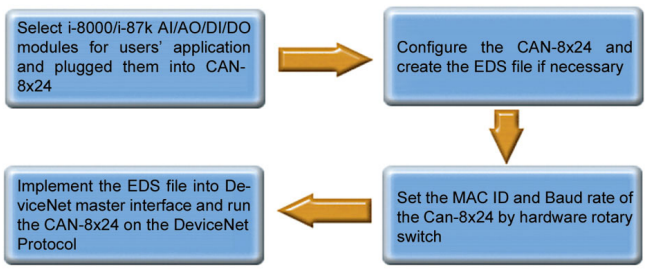
Dimensions

The CAN-8124/CAN-8224 main unit based on the modular design offers many good features to the users and provides more flexibility in data acquisition and control system. CAN-8124 and CAN-8224 are the DeviceNet Group 2 only Server devices. They are applied as the slaves in DevciceNet network. In addition, ICP DAS also presents a Utility tool to allow users to configure and create the EDS file for the specific IO modules plugged in. CAN-8124/CAN-8224 are specifically fit for the distribution system. With the hot-swap function, it is convenient for maintaining system.

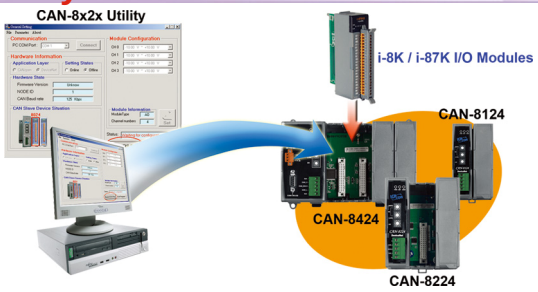
Features

- Number of Nodes: 64 max.
- Baud Rate: 125K, 250K, 500K bps
- Support Message Groups: 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

Design Flowchart

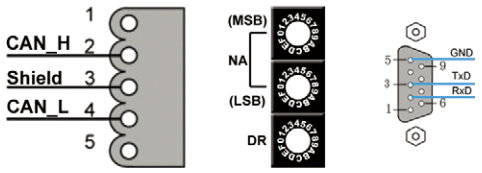


Utility Features



CAN-8424 main unit can be plugged in the DCON (I-8K/I-87K) IO modules to create a customized DeviceNet slave device and application. In order to allow user to easy apply the device on the network, ICP DAS also provides the Utility tool to configure the IO connection path, assembly and application objects information and create the EDS file of the device.

Pin Assignments



NA: Node Address **DR: Device Rate**

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

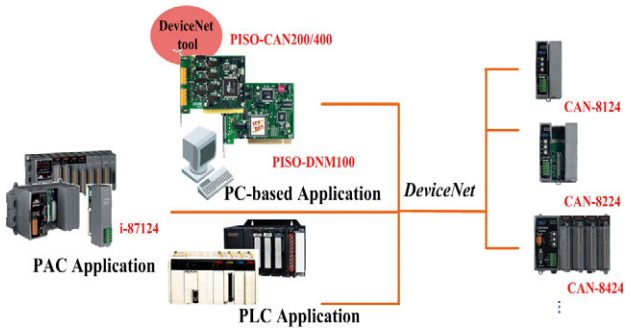
Hardware Specifications

Model Name	CAN-8124	CAN-8224
Hardware		
CPU	80186, 80 MHz or compatible	
SRAM/Flash/EEPROM	512 KB / 512 KB / 16 KB	
DPRAM	8 KB	
NVRAM	31 bytes (battery backup, data valid for up to 10 years)	
RTC (Real Time Clock)	Yes	
Watchdog	CPU built-in	
Expansion Slot	1 slots	2 slots
CAN Interface		
Controller	NXP SJA1000T with 16 MHz clock	
Transceiver	NXP 82C250	
Channel number	1	
Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)	
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	
Terminator Resistor	Jumper for 120 Ω terminator resistor	
Specification	ISO-11898-2, CAN 2.0A and CAN 2.0B	
Protocol	DeviceNet Volumn I ver2.0, Volumn II ver2.0 Predefined Master/Slave Connection set	
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	1.7 W	2 W
Mechanism		
Installation	DIN-Rail DIN-Rail or 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 ℃	
Storage Temp.	-40 ~ 80 ℃	
Humidity	5 ~ 95% RH, non-condensing	

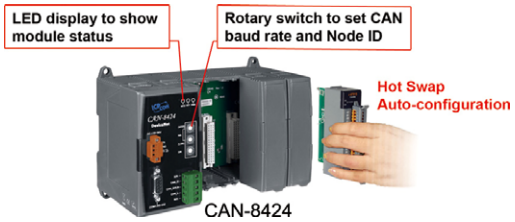
LED Indicators

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-8124	DeviceNet remote I/O unit with 1 empty slot
CAN-8224	DeviceNet remote I/O unit with 2 empty slot