

i-8000 I/O Modules

SERIES

3. I/O Modules

There are two types of I/O modules, Parallel and Serial. The parallel modules are high-speed modules and have to be installed in the Main Control Unit. The Serial I/O Modules can be installed in either the Parallel or Serial I/O expansion slots.



Parallel I/O Modules (8K series Modules)

Features:

- High speed A/D: 100K samples/second
- High speed D/A: 30K from -10V to +10V
- High speed D/I & D/O; All Digital I/O Modules provide visual indication of status via LED indicators.
- High speed stepping/Servo motion control module
- High speed encoder module
- High performance Counter / Frequency modules
- High speed multi-channel RS-232/RS-422/RS-485 modules
- Printer interface & X-Socket interface module

Serial I/O modules (87K series Modules)

Features:

- RTD Sensor Input Module
- Thermocouple Input Module
- Strain Gauge Input Module
- High Resolution Multi-channel Analog Input Module
- Isolated Multi-channel D/A Modules
- Digital Input and Digital Output Modules with Latch and Counter Function
- Counter / Frequency Modules

i-8000 Parallel I/O Modules

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8K Digital I/O, Relay and Counter Modules Selection Guide

Model (I-)	8037	8040	8041	8042	8050	8051	8052	8053	8054	8055	8056
Digital input Channels	–	32	–	16	Can be up to 16	16	8 isolation 5000V differential	16 isolation 3750V	8 isolation 3750V	8	–
Digital Output Channels	16 open source isolation 3750V	–	32	16	Can be up to 16	–	–	–	8 open collector isolation 3750V	8 open collector	16 open collector
LED Display	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Safe Value	Yes	–	Yes	Yes	–	–	–	–	Yes	Yes	Yes
Power-on Preset Value	Yes	–	Yes	Yes	–	–	–	–	Yes	Yes	Yes
Dual Watchdog	–	–	–	–	–	–	–	–	–	–	–
Availability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Model (I-)	8057	8058	8060	8063	8064	8065	8066	8068	8069
Digital input Channels	–	8 isolation 3750V AC/DC Max.250V Input	–	4 isolation 3750V	–	–	–	–	–
Digital Output Channels	16 open-collector isolation 3750V	–	6 Form C	4 Form C	8 Channel Relay Form A AC 250V/5A DC 30V/5A	8 Channel SSR AC-type Relay Form A 24 to 265 Vrms@ 1.0Arms	8 Channel SSR DC-type Relay Form A DC: 3-30Vdc @1.0A	8 Channel Relay Form A x4 Form c x4	8 Photo Mos Relay Form A x8
LED Display	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Safe Value	Yes	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Power-on Preset Value	Yes	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dual Watchdog	–	–	–	–	–	–	–	–	–
Availability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

i-8000 Parallel I/O Modules

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8K Digital Modules

I-8037



I-8037-G



I-8037 / I-8037-G (Gray color)
16-channel Isolated Open-source Output Module

- Digital output channels : 16
- Digital output : Open-source
- Digital output : Output 100mA / 30V(Max)
- Isolation: 3750 Vrms
- Power consumption: 0.5W

I-8040



I-8040-G



I-8040 / I-8040-G (Gray color) □
32-channel Isolated Digital Input Module

- Digital input channels: 32
- 3750V isolation (External power)
- 3000V isolation (Internal power)
- Input Voltage: 3.5V~30V
- Power consumption: 0.3W

I-8041



I-8041-G



I-8041 / I-8041-G (Gray color)
32-channel Isolated Digital Output Module

- Digital output channels: 32
- 3750V isolation (External power)
- Open-collector Output: 125mA/channel
- Power consumption: 1.7W

I-8042



I-8042-G



I-8042 / I-8042-G (Gray color)
16-channel Isolated Digital Input & 16-channel Isolated Digital Output Module

- Digital Input channels: 16
- Digital Output channels: 16
- Other spec. are similar to I-8040 and I-8041
- Power consumption: 1.5W

I-8050



I-8050-G



I-8050 / I-8050-G (Gray color)
16-channel Universal Digital I/O Module

- Digital I/O channels: 16
- I/O Type: Selectable by programmed
- Digital Input: +2V(0); +4V~30V(1)
- Digital Output: Open-collector
- Output: 100mA/channel
- Power consumption: 1W

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i-8000 Parallel I/O Modules

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8K Digital Modules

I-8051



I-8051-G



I-8051 / I-8051-G (Gray color)

16-channel Digital Input Module

- Digital Input channels: 16
- Digital Input level:
 - Logical level 0: +1V max.
 - Logical level 1: +3.5V~30V
- Power consumption: 0.8W

I-8052



I-8052-G



I-8052 / I-8052-G (Gray color) □

8-channel Isolated Digital Input Module

- Digital input channels: 8
- Differential input:
 - Logical level 0: +1V max.
 - Logical level 1: +3.5V~30V
- Isolation: 5000 Vrms.
- Power consumption: 0.8W

I-8053



I-8053-G



I-8053 / I-8053-G (Gray color)

16-channel Isolated Digital Input Module

- Digital input channels: 16
- Single-ended input:
 - Logical level 0: +1V max.
 - Logical level 1: +3.5V~30V
- Input resistance: 3K Ω , 1/4W
- Power consumption: 0.8W

I-8054



I-8054-G



I-8054 / I-8054-G (Gray color)

16-channel Isolated Digital I/O Module

- Digital input channels: 8
 - Logical level 0: +1V max.
 - Logical level 1: +3.5V~30V
- Digital output channels: 8
 - O.C. output: 375mA/channel, 30V
- Power consumption: 1W

I-8055



I-8055-G



I-8055 / I-8055-G (Gray color)

16-channel Digital I/O Module

- Digital input channels: 8
 - Logical level 0: +1V max.
 - Logical level 1: +3.5V~30V
- Digital output channels: 8
 - O.C. output: 125mA/channel
- Power consumption: 0.5W

i-8000 Parallel I/O Modules

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8K Digital Modules

I-8056



I-8056-G

I-8056 / I-8056-G (Gray color) 16-channel Non-isolated Open-collector Output Module

- Digital output channels: 16
- O.C. output: 125mA/channel, 30V
- Power consumption: 0.7W

I-8057



I-8057-G

I-8057 / I-8057-G (Gray color) 16-channel Isolated Open-collector Output Module

- Digital output channels: 16
- O.C. output: 125mA/channel, 30V
- Isolation: 3750 Vrms
- Power consumption: 0.5W

I-8058



I-8058-G

I-8058 / I-8058-G (Gray color) □ 8-channel Isolated Digital Input Module

- Digital input channels: 8
- Input type: differential
- Input Voltage: Logical High: AC/DC 80V mini
- Logical Low: AC/DC 30V max. □
- Maximum Input voltage: AC/DC 250V
- Operating frequency: 1KHz(max.)
- Isolation: 3750 Vrms
- Power consumption: 0.8W

I-8060



I-8060-G

I-8060 / I-8060-G (Gray color) 6-channel Relay Output Module

- Digital output channels: 6
- Form C relay
- Contact Rating:
- AC: 125V @0.6A; 250V @0.3A
- DC: 30V @2A; 110V @0.6A
- Power consumption: 2.2W

I-8063



I-8063-G

I-8063 / I-8063-G (Gray color) 8-channel Isolated Digital I/O Module

- Digital input channels: 4
- Differential Input
- Digital output channels: 4
- Form C relay
- AC: 125V @0.6A; 250V @0.3A
- Power consumption: 2W

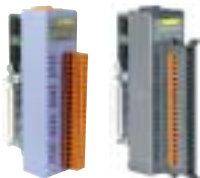
i-8000 Parallel I/O Modules

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8K Digital Modules

I-8064

I-8064-G



I-8064 / I-8064-G (Gray color) □ 8-channel Power Relay Output Module

- Digital output channels: 8
- Form A relay
- Contact Rating: AC: 250V @5A
- □ DC: 30V @5A
- Power consumption: 2.2W

I-8065

I-8065-G



I-8065 / I-8065-G (Gray color) □ 8-channel SSR-AC Output Module

- Digital output channels: 8
- Form A SSR
- Contact Rating: AC: 24~265Vrms @1.0Arms
- Max. load current: 1.0Arms
- Power consumption: 0.8W

I-8066

I-8066-G



I-8066 / I-8066-G (Gray color) □ 8-channel SSR-DC Output Module

- Digital output channels: 8
- Form A SSR
- Contact Rating: DC: 3~30 Vdc @1.0A
- Max. load current: 1.0A
- Power consumption: 0.8W

I-8068

I-8068-G

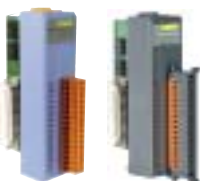


I-8068 / I-8068-G (Gray color) □ 8-channel Relay Output Module

- Digital output channels: 8
- Form C x4; Form A x4
- Contact Rating: AC: 120V @0.5A
- DC: 30V @1A
- Power consumption: 2.4W

I-8069

I-8069-G



I-8069 / I-8069-G (Gray color) □ 8-channel Photo Mos Relay Output Module

- Digital output channels: 8
- Form A Photo Mos relay
- Photo Mos Relay
- Load voltage: 350V (Peak AC)
- Continuous load current: 0.13A
- Power consumption: 0.5W

i-8000 Parallel I/O Modules

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8K Analog Input/Output Modules

I-8017H



I-8017H-G



I-8017H / I-8017H-G (Gray color)

8-channel Isolated Analog Input Module

- Analog Input Channels: 8
- Resolution: 14-bit
- Input Type: Differential
- Input Range : -10V, -5V, -2.5V, -1.25V, -20mA
- (need 125% external resistor)
- Isolation Voltage: 3000Vdc
- Power Consumption: 2W
- Sampling rate:
 - Single Channel Polling Mode : 100Ksps
 - Single Channel Interrupt Mode : 50Ksps
 - 8 Channels Scan Mode : 16Ksps
- Input Bandwidth : 100KHz @-3dB
- Input impedance: 10M%

I-8024



I-8024-G



I-8024 / I-8024-G (Gray color)

4-channel Isolated Analog Output Module

- Analog output channels: 4
- Voltage output: +/-10V
- Current output: 0~20mA/4~20mA
- Isolation: 3000V
- Power Consumption: 2.2W

i-8000 Parallel I/O Modules

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8K Counter/Frequency Modules

I-8080

I-8080-G



I-8080 / I-8080-G (Gray color)

4/8 channel Counter & Frequency Module

- Counter channel:4/8
- Frequency channel:8
- Input frequency:0~450KHz (Frequency mode)
 - 450KHz max (Counter mode)
- Power consumption:1W

8K Motion Control & Others

I-8090

I-8090-G



I-8090 / I-8090-G (Gray color)

3-axis Encoder Input Module

- Channels: 3
- Encoder type: single-ended or differential
- Logical level: TTL and COMS compatible
- Accept inputs from incremental or quadrature □
□ encoders
- Maximum quadrature input frequency: 1MHz

I-8091

I-8091-G



I-8091 / I-8091-G (Gray color)□

2-axis Stepper/Servo Module

- Stepper channels: 2
- Step rate: 1pps~250Kpps
- Max. step count: +/-2
- Acceleration/Deceleration: Automatic □□
□ trapezoidal acceleration/deceleration
- Output pulse signal: Two pulse (CW/CCW) □
□ mode or one pulse (Pulse, Direction) mode

I-8072

I-8072-G



I-8072 / I-8072-G (Gray color)

Printer Port & Xsocket Card

- Support Printer port
- Support two Xsocket
- Power Consumption: 0.3W

i-8000 Parallel I/O Modules

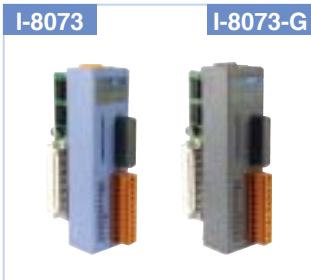
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I-8048 / I-8048-G (Gray color)

8-channel Digital Input with Interrupt Module

- Parallel I/O Module
- Digital Input Channels: 8
- Input Signal: isolated or non-isolated by Jumper
- Logic High level:
 - Isolated: 4V ~30V
 - Non-Isolated TTL: 2V ~ 5V
- Logic Low level:
 - Isolated: 0 ~1V
 - Non-Isolated TTL: 0V~ 0.8V
- Isolation Voltage:2000V
- Built-in isolated power supply:5V,200mA max.
- Rising/Falling edge interrupt programmable
- LED indicator for each channel of digital input
- Power Consumption: 0.8W



I-8073 / I-8073-G (Gray color)

MultiMediaCard(MMC) module

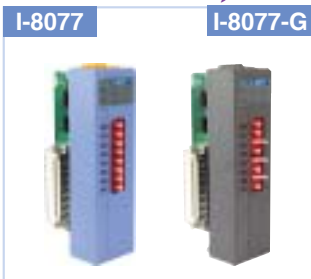
- MultiMediaCard socket : 1
- Digital input Channels :4
- Logical level 0 : +1V max.
- Logical level 1 : +3.5V~30V
- Digital output channels : 4
- Open-collector output :100mA/30V max
- Analog Input Channel : 1
- Input Range : +/-5V and 0~5V
- Power Consumption: 1W



I-8074 / I-8074-G (Gray color)

Memory module

- SRAM size : 128 ~ 1M Bytes
- Battery backup : Yes
- Battery monitor.
- Status LED:4 (Low Battery and Bad Battery)
- Power consumption: 1 W



I-8077 / I-8077-G (Gray color)

16-channel Digital I/O Simulator Module

- Digital Input Channels:8
- Input type : Toggle switch
- Output LED:8
- Power Consumption: 0.3W

i-8000 Parallel Communication Modules

SERIES

8K RS-232/RS-422/RS-485 Modules

I-8112



I-8112-G

I-8112:□

2-channel RS-232 Module

- RS-232 channels: 2
- Modem control
- TXD, RXD, RTS, CTS, DSR, DTR,
- DCD, RI, GND
- Transmission speed: 115.2K bps
- Shared Interrupt

I-8114



I-8114-G

I-8114:□

4-channel RS-232 Module

- RS-232 channels: 4
- Modem control
- TXD, RXD, RTS, CTS, DSR, DTR,
- DCD, RI, GND
- Transmission speed: 115.2K bps
- Shared Interrupt

I-8142



I-8142-G

I-8142:□

2-channel RS-422/485 Module

- RS-422/485 channels: 2
- Self-tuner chip inside
- TXD+, TXD-, RXD+, RXD-, RTS+,
- RTS-, CTS+, CTS-, GND
- Transmission speed: 115.2K bps
- Shared Interrupt

I-8142i



I-8142i-G

I-8142i:□

2-channel isolated RS-422/485 Module

- RS-422/485 channels: 2
- Self-tuner chip inside
- TXD+, TXD-, RXD+, RXD-, RTS+,
- RTS-, CTS+, CTS-, GND
- Transmission speed: 115.2K bps
- Shared Interrupt
- Isolation: 3000V

I-8144



I-8144-G

I-8144:□

4-channel RS-422/485 Module

- RS-422/485 channels: 4
- Self-tuner chip inside
- TXD+, TXD-, RXD+, RXD-, RTS+,
- RTS-, CTS+, CTS-, GND
- Transmission speed: 115.2K bps
- Shared Interrupt

NEW!!