



Main Features

- Finger-safe wiring cover
- Detachable screw terminals
- Rotational pin-assignment marks
- On-module LED indicators
- User-friendly wiring label
- Multiple mounting methods
- 4-CH analog inputs (differential)
- 2-CH analog outputs
- 8-CH digital inputs (PNP/NPN)
- 8-CH digital outputs (PNP)

Product Overview

NEIO-B1842 is a cost-effective EtherCAT I/O slave module. Each NEIO-B1842 is equipped with 4-ch Analog Input, 2-ch Analog Output, 8-ch Digital Input, and 8-ch Digital Output. NEIO-B1842 is fitted with adjustable voltage and current input ranges for different application requirements. NEIO-B1842 also provides watchdog function; when it is disconnected, watchdog function can keep the module in a safe state and restore to regular operation. All of the NEIO modules are provided with high isolation protection and verified by the EtherCAT conformance test tool.

Specifications

Analog Input

- Number of channels: 4 (differential)
- Input type: voltage, current
- Input range: $\pm 10V$, $0\sim 20mA$
- Resolution: 16-bit
- Sampling rate: 1 kHz/ch
- Accuracy: $< \pm 0.1\%$ of FSR

Analog Output

- Number of channels: 2
- Output type: voltage, current
- Output range : $0\sim 5V$, $0\sim 10V$, $\pm 5V$, $\pm 10V$, $0\sim 20mA$, $4\sim 20mA$
- Resolution: 16-bit
- Accuracy
 $< \pm 0.2\%$ of FSR for voltage output
 $< \pm 0.1\%$ of FSR for current output

Digital Input

- Number of channels : 8 (PNP/NPN)
- Input voltage: 24 VDC
- On-state voltage, "1": $9\sim 24$ VDC
- Off-state voltage, "0": $0\sim 8$ VDC
- Input filter: 1ms

Digital Output

- Number of channels: 8 (PNP)
- Input voltage: 24 VDC
- Output load type: resistive, inductive, capacitive
- Max. output current: 500 mA/ch
- Switching time
Off to on: 100 us
On to off: 150 us

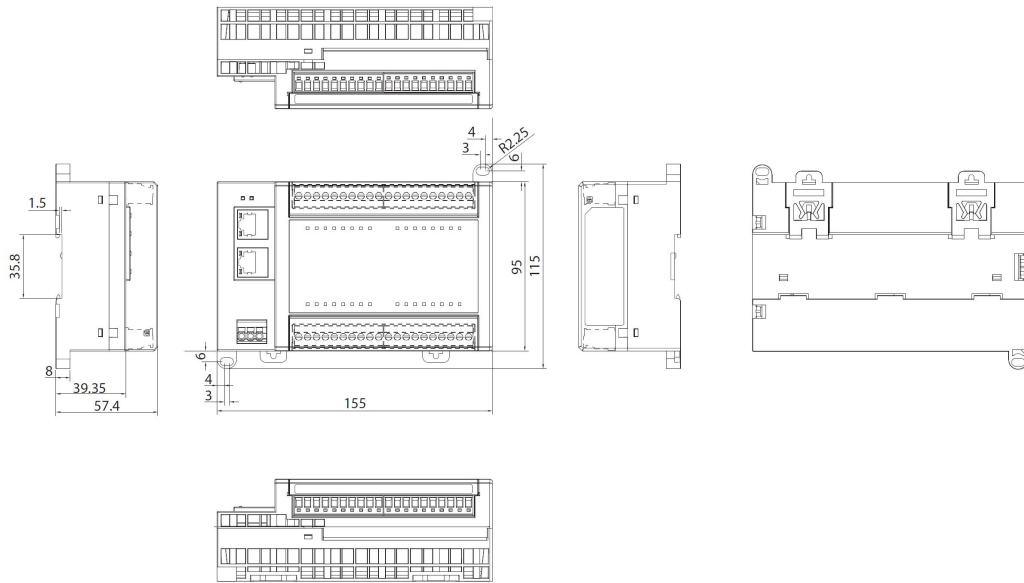
Communication

- Protocol: EtherCAT
- Bus interface: 2 x RJ-45
- Media: Ethernet cable (min. CAT5), shielded
- Distance between stations: maxi. 100m (100BASE-TX)
- Data transfer rate: 100M baud

Common Section

- Electrical isolation: 2.5 kV (power contact)
- Operating temperature: $0^{\circ}C\sim 55^{\circ}C$
- Storage temperature: $-40^{\circ}C\sim 85^{\circ}C$
- Relative humidity: $5\sim 95\%$, non-condensation, non-operating
- Shock: IEC 60068-2-27
- Vibration: IEC 60068-2-6, IEC 60068-2-64
- Enclosure type rating: IP20 Mounting type: din-rail (35mm), wall-mount
- Dimensions (mm): 155 x 115 x 57.4 (W x H x D)

Dimension Drawing



Power Requirement

- DC input range: DC 24V $\pm 20\%$ with over-voltage and reversed-voltage protection

Certifications

- CE
- FCC Class A

Ordering Information

NEIO-B1842 (P/N: 10J80184200X0)

4-CH AI, 2-CH AO, 16-CH DI/O EtherCAT slave module