



Main Features

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

Product Overview

NEIO-B1841 is a cost-effective EtherCAT I/O slave module. Each NEIO-B1841 is equipped with 8-CH analog Input, 2-CH analog output, 8-CH digital input, 8-CH digital output. NEIO-B1841 provides adjustable input range of voltage and current, so that it can fulfill different application requirements. NEIO-B1841 also provides watchdog function, when it is disconnected, watchdog function can keep the module in a safe state and restore to normal operation. All of the NEIO modules are provided with high isolation protection, and verified by the EtherCAT conformance test tool.

Specifications

Analog Input (voltage input)

- Number of channels : 8 (single-ended)
- Input type: voltage, current
- Input range: 0~5V, 0~10V, $\pm 5V$, $\pm 10V$, 0~20mA, 4~20mA
- Resolution: 16-bit
- Sampling rate: 1 kHz/ch
- Accuracy: $< \pm 0.3\%$ of FSR

Analog Output

- Number of channels : 8 (single-ended)
- Output type: voltage, current
- Output range : 0~5V, 0~10V, $\pm 5V$, $\pm 10V$, 0~20mA, 4~20mA
- 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 (NPN)
- Input voltage: $24 V_{DC}$
- On-state voltage, "1": 9~ $24 V_{DC}$
- Off-state voltage, "0": 0~ $8 V_{DC}$
- Input filter: 1ms

Digital Output

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

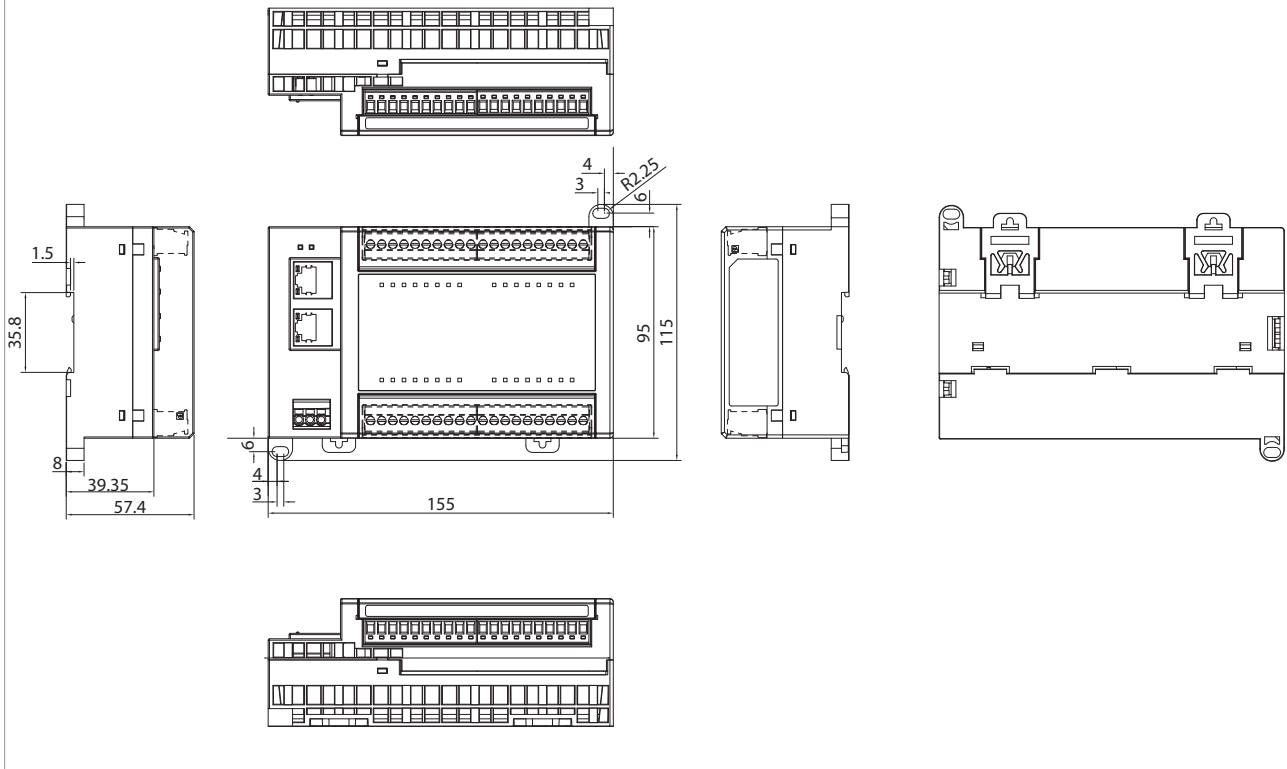
Communication

- Protocol: EtherCAT
- Bus interface: 2 x RJ-45 (daisy-chain)
- Media: Ethernet cable (min. CAT 5), shielded
- Distance between stations: maximum. 100m (100BASE-TX)
- Data transfer rate: 100M baud

Power Requirements

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

Dimension Drawing



Common Section

- Electrical isolation: 2.5 kV (power contact)
- Operating temperature: 0°C~55°C
- Storage temperature: -40°C~85°C
- Relative humidity: 5~95%, 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
- Dimesions (mm): 155 x 115 x 57.4 (W x H x D)

Certifications

- CE
- FCC Class A

Ordering Information

- **NEIO-B1841 (P/N: 10J80184100X0)**
8-CH AI, 2-CH AO, 16-CH DI/O EtherCAT slave module
- **AC to DC din rail power supply (P/N: 7440060001X00)**
60 W 24V/2.5A for NISE