



NEIO-B1841

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

- ♦ 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 : 2 (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 (PNP/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

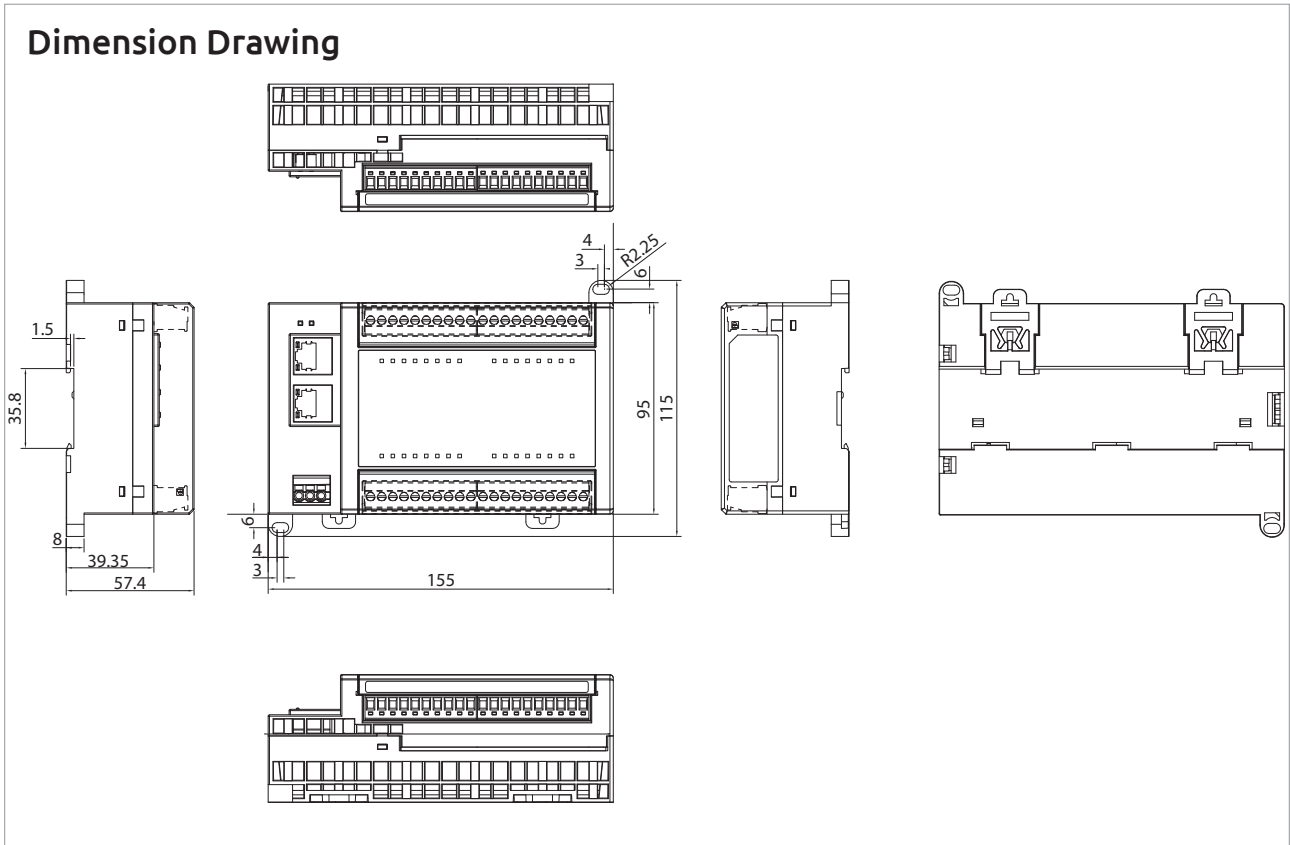
- ♦ Number of channels: 8 (PNP)
- ♦ Input voltage: $24 V_{DC}$
- ♦ Output load type: resistive, inductive, capacitive
- ♦ Max. output current: 500 mA/ch
- ♦ Switching time
 - Off to on: 100 us
 - On to off: 150 us

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



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