



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  $\mu s$
  - On to off: 150  $\mu s$

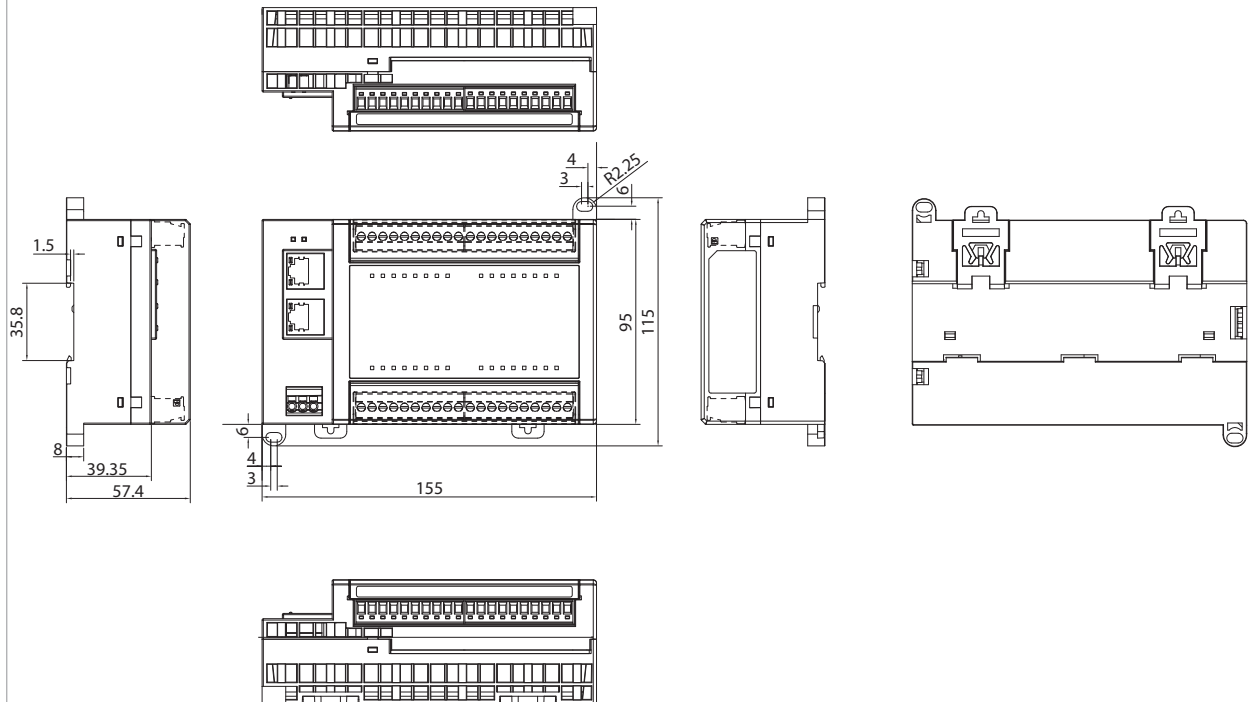
### Communication

- ♦ 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