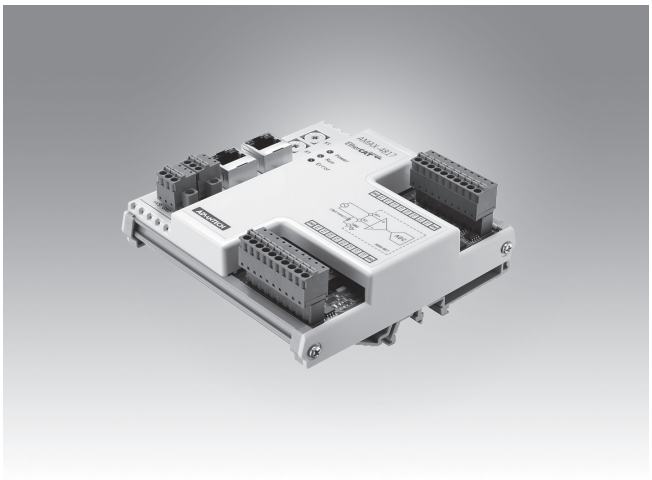
AMAX-4817
AMAX-4820

8-Channel, 16-Bit Isolated Analog Input EtherCAT Remote I/O Module

4-Channel, 16-Bit Isolated Analog Output EtherCAT Remote I/O Module



AMAX-4817

AMAX-4820

Features

- Suitable for EtherCAT networks
- 8 x 16-bit analog input channels with 2,500 V_{DC} isolation
- Wide common-mode voltage range (±275 V)
- Removable European-type connector
- Supports EtherCAT distributed clocks (DC) mode and SyncManager mode
- 2 x Rotating switches that support up to 256 SubDevice IDs

Introduction

AMAX-4817 is an industrial-grade remote I/O SubDevice module equipped with the EtherCAT protocol. European-type pluggable terminal blocks facilitate module setup and maintenance, while the compact size and support for DIN-rail mounting ensure easy installation in cabinet configurations. For safe and reliable operation, all of the 8 analog input channels are protected by a 2,500 V_{DC} isolation circuit.

Specifications

Communication

Interface	EtherCAT
Data Transfer Medium	Ethernet/EtherCAT cable (min. CAT 5), shielded
Distance Between Modules	Max. 100 m (100BASE-TX)
Communication Cycle Time	100 µs (guarantees all channel data are updated)
Data Transfer Rates	100 Mbps

Analog Input

Channels	8
Resolution	16 bits
Input Range	0 ~ 10V, ±10V, 0~20mA, ±20mA
Common-Mode Voltage Range	±275 V
Measurement Error	<±0.1%
Isolation Protection	2,500 V_{DC}
Bandwidth(-3dB)	1.375KHz/ch
Conversion Time	40 µs for all channels

Note: Because the analog sampling rate exceeds the communication cycle time, the maximum polling rate will be limited by the communication cycle time = 10 kS/s for each channel.

General

Connectors	2 x 10-pin terminal block (I/O), 3.81 mm 1 x 3-pin screw terminal block (power), 3.81 mm 2 x RJ-45 (EtherCAT)
Dimensions	120 x 120 x 40 mm (4.72 x 4.72 x 1.57 in)
Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
Storage Temperature	-40 ~ 70 °C (-40 ~ 158 °F)
Storage Humidity	5 ~ 95% RH (non-condensing)
Power Supply	10 ~ 30 V_{DC}
Power Consumption	Typical 160 mA @24 V; Max. 190 mA @24 V

Ordering Information

AMAX-4817-B	8-ch, 16-bit isolated AI EtherCAT remote I/O module
96PSD-A40W24-MM	DIN rail A/D 100 ~ 240 V, 40 W, 24 V

Features

- Suitable for EtherCAT networks
- 4 x 16-bit analog output channels with 2,500 V_{DC} isolation
- Multiple voltage and current output ranges
- Removable European-type connector
- Supports EtherCAT distributed clocks (DC) mode and SyncManager mode
- 2 x Rotating switches that support up to 256 SubDevice IDs

Introduction

AMAX-4820 is an industrial-grade remote I/O SubDevice module equipped with the EtherCAT protocol. European-type pluggable terminal blocks facilitate module setup and maintenance, while the compact size and support for DIN-rail mounting ensure easy installation in cabinet configurations. For safe and reliable operation, all of the 4 analog output channels are protected by a 2,500 V_{DC} isolation circuit.

Specifications

Communication

Interface	EtherCAT
Data Transfer Medium	Ethernet/EtherCAT cable (min. CAT 5), shielded
Distance Between Modules	Max. 100 m (100BASE-TX)
Communication Cycle Time	100 µs (guarantees all channel data are updated)
Data Transfer Rates	100 Mbps

Analog Output

Channels	4
Resolution	16 bits
Output Voltage Range	0 ~ 5 V, 0 ~ 10 V, ±5 V, ±10 V
Output Current Range	0 ~ 20 mA, 4 ~ 20 mA
Load	> 1 kΩ (voltage output) < 625 Ω (current output)
Output Error	< ±0.1%
Isolation Protection	2,500 V_{DC}
Conversion Time	40 µs for all channels

General

Connectors	1 x 10-pin terminal block (I/O), 3.81 mm 1 x 3-pin screw terminal block (power), 3.81 mm 2 x RJ-45 (EtherCAT)
Dimensions	120 x 120 x 40 mm (4.72 x 4.72 x 1.57 in)
Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
Storage Temperature	-40 ~ 70 °C (-40 ~ 158 °F)
Storage Humidity	5 ~ 95% RH (non-condensing)
Power Supply	10 ~ 30 V_{DC}
Power Consumption	Typical 160 mA @24 V; Max. 190 mA @24 V

Ordering Information

AMAX-4820-B	4-ch, 16-bit isolated AO EtherCAT remote I/O module
96PSD-A40W24-MM	DIN rail A/D 100 ~ 240 V, 40 W, 24 V

Last updated: 7-Aug-2023