

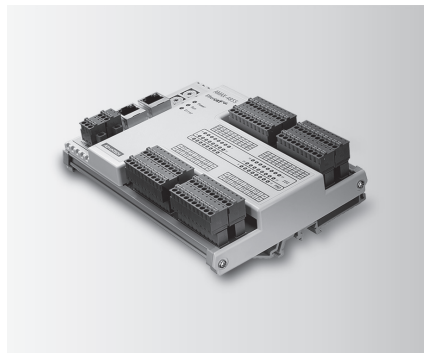
# AMAX-4855

# AMAX-4856

# AMAX-4862

**32-ch IDI & 16-ch PhotoMOS EtherCAT Remote I/O module**  
**32-ch Isolated Digital Input and 32-ch Isolated Digital Output EtherCAT Remote I/O Module**

**16-ch IDI & 16-ch Relay EtherCAT Remote I/O module**



AMAX-4855



## Features

- Suitable for EtherCAT networks
- 32-ch digital input and 16-ch PhotoMOS Relay output (Form A)
- 1500 V<sub>DC</sub> optical isolation for relay outputs
- Quick removable European type connector
- LED indicators for I/O status
- Supports EtherCAT Distributed Clock (DC) mode and SyncManager mode
- Two Rotary switches for up to 256 slave IDs

## Introduction

The AMAX-4855 is an industrial EtherCAT slave module equipped with the EtherCAT protocol. Its compact size and DIN-rail mount kit can install easily in a cabinet. Euro type pluggable terminal blocks and LED indicator help users to maintain and set up their system. All digital input and PhotoMOS Relay Output channels are protected by isolation circuits.

## Specifications

### Communication

- **Interface** EtherCAT
- **Data transfer medium** Ethernet/EtherCAT cable (min. CAT 5), shielded
- **Distance between modules** Max. 100 m (100BASE-TX)
- **Data transfer rates** 100 Mbps
- **Configuration** Not required
- **Communication Cycle Time** 100µs

### Digital Input

- **Channels** 32
- **Input voltage** Logic 0: 3 V max.  
Logic 1: 10 V min. (30 V max.)
- **Isolation protection** 2,500 V<sub>DC</sub>

### PhotoMOS Relay Output

- **Channels** 16
- **Relay type** PhotoMOS SPST(Form A)
- **Load Voltage** 60V (AC peak or DC)
- **Load current** 1.2A
- **Peak load current** 4A @100ms(1 pulse)
- **Isolation protection** 1,500 V<sub>DC</sub>
- **Turn-on time** 1 ms typical
- **Turn-off time** 0.6 ms typical

### General

- **Connectors** 10-pin 3.81 mm terminal block \* 8 (I/O)  
3-pin 3.81 mm screw terminal block (power)  
RJ-45 \* 2 (EtherCAT)
- **Dimensions** 168 mm x 120 mm x 40 mm
- **Operating temperature** -20 ~ 60°C (32 ~ 140°F)
- **Storage temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage humidity** 5 ~ 95% RH (non-condensing)
- **Power supply** 10 ~ 30 V<sub>DC</sub>
- **Power Consumption** Typical 85mA @24V;  
Max. 130mA @24V

## Ordering Information

- **AMAX-4855-AE** 32-ch IDI & 16-ch PhotoMOS EtherCAT Remote I/O module
- **96PS-A40WDIN** DIN RAIL A/D 100-240V 40W 24V



AMAX-4856



## Features

- Suitable for EtherCAT networks
- 32-ch digital input and 32-ch digital output with 2,500 V<sub>DC</sub> isolation
- Wide input voltage range (10 ~ 30 V<sub>DC</sub>)
- Wide output voltage range (5 ~ 40 V<sub>DC</sub>) and high output current (350 mA/ch)
- Quick removable European type connector
- LED indicators for I/O status
- Supports EtherCAT Distributed Clock (DC) mode and SyncManager mode
- Two Rotary switches for up to 256 slave IDs

## Introduction

The AMAX-4856 is an industrial EtherCAT slave module equipped with the EtherCAT protocol. Its compact size and DIN-rail mount kit can install easily in a cabinet. Euro type pluggable terminal blocks and LED indicator help users to maintain and set up their system. All digital input and digital output channels are protected by 2,500 V<sub>DC</sub> isolation circuits.

## Specifications

### Communication

- **Interface** EtherCAT
- **Data transfer medium** Ethernet/EtherCAT cable (min. CAT 5), shielded
- **Distance between modules** Max. 100 m (100BASE-TX)
- **Data transfer rates** 100 Mbps
- **Configuration** Not required
- **Communication Cycle Time** 100µs

### Digital Input

- **Channels** 32
- **Input voltage** Logic 0: 3 V max.  
Logic 1: 10 V min. (30 V max.)
- **Isolation protection** 2,500 V<sub>DC</sub>

### Digital Output

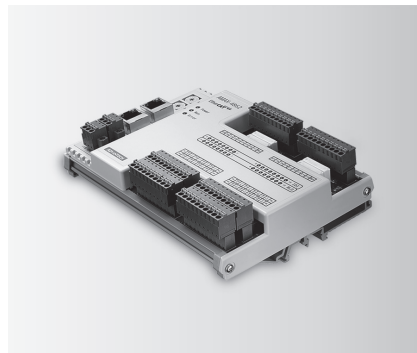
- **Channels** 32
- **Load voltage** 5 ~ 40 V<sub>DC</sub>
- **Load current** 350mA/ch (sink) @ 25°C  
250mA/ch (sink) @ 60°C
- **Isolation protection** 2,500 V<sub>DC</sub>
- **Opto-isolator Response Time** 100µs

### General

- **Connectors** 10-pin 3.81 mm terminal block \* 8 (I/O)  
3-pin 3.81 mm screw terminal block (power)  
RJ-45 \* 2 (EtherCAT)
- **Dimensions** 168 mm x 120 mm x 40 mm
- **Operating temperature** -20 ~ 60°C (32 ~ 140°F)
- **Storage temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage humidity** 5 ~ 95% RH (non-condensing)
- **Power supply** 10 ~ 30 V<sub>DC</sub>
- **Power Consumption** Typical 85mA @24V;  
Max. 130mA @24V

## Ordering Information

- **AMAX-4856-AE** 32-ch Isolated Digital Input and 32-ch Isolated Digital Output EtherCAT Remote I/O Module
- **96PS-A40WDIN** DIN RAIL A/D 100-240V 40W 24V



AMAX-4862



## Features

- Suitable for EtherCAT networks
- 16-ch Isolated Digital Input and 16-ch Form A-type Relay Output
- High-voltage isolation on input channel (2,500 V<sub>DC</sub>)
- Quick removable European type connector
- LED indicators for I/O status
- Supports EtherCAT Distributed Clock (DC) mode and SyncManager mode
- Two Rotary switches for up to 256 slave IDs

## Introduction

The AMAX-4862 is an industrial EtherCAT slave module equipped with the EtherCAT protocol. Its compact size and DIN-rail mount kit can install easily in a cabinet. Euro type pluggable terminal blocks and LED indicator help users to maintain and set up their system. All digital input channels are protected by 2,500 V<sub>DC</sub> isolation circuits.

## Specifications

### Communication

- **Interface** EtherCAT
- **Data transfer medium** Ethernet/EtherCAT cable (min. CAT 5), shielded
- **Distance between modules** Max. 100 m (100BASE-TX)
- **Data transfer rates** 100 Mbps
- **Configuration** Not required
- **Communication Cycle Time** 100µs

### Digital Input

- **Channels** 16
- **Input voltage** Logic 0: 3 V max.  
Logic 1: 10 V min. (30 V max.)
- **Isolation protection** 2,500 V<sub>DC</sub>

### Relay Output

- **Channels** 16
- **Relay Type** Form A
- **Contact Rating (resistive)** 2A @ 250 V<sub>AC</sub>, 2A @ 30 V<sub>DC</sub>
- **Max. Switching Power** 500VA, 60W
- **Max. Switching Voltage** 270V AC, 125 V<sub>DC</sub>
- **Resistance** 30mΩ max.
- **Operating Time** Max. 10ms
- **Releasing Time** Max. 5ms
- **Life Expectancy** Mechanical 2 x 10<sup>7</sup> ops. at no load.  
Electrical 3 x 10<sup>6</sup> ops. @2A/250V<sub>AC</sub>

### General

- **Connectors** 10-pin 3.81 mm terminal block \* 6 (I/O)  
3-pin 3.81 mm screw terminal block (power)  
RJ-45 \* 2 (EtherCAT)
- **Dimensions** 168 mm x 120 mm x 40 mm
- **Operating temperature** -20 ~ 60°C (32 ~ 140°F)
- **Storage temperature** -40 ~ 70°C (-40 ~ 158°F)
- **Storage humidity** 5 ~ 95% RH (non-condensing)
- **Power supply** 10 ~ 30 V<sub>DC</sub>
- **Power Consumption** Typical 85mA @24V;  
Max. 130mA @24V

## Ordering Information

- **AMAX-4862-AE** 16-ch IDI & 16-ch Relay EtherCAT Remote I/O module
- **96PS-A40WDIN** DIN RAIL A/D 100-240V 40W 24V