

# AMAX-2750SY Series

## 32-ch Isolated Digital Input/Output Slave Modules



### Features

- Max. 20 Mbps transfer rate
- Onboard terminal for direct wiring
- Easy installation with RJ45 phone jack and LED diagnostic
- LED indicator for each IO channel (switch by SW4)
- Selection of I/O-channel configuration (32-ch DI, 32-ch DO or 16/16-ch Digital I/O)
- 2,500 V<sub>RMS</sub> Isolation voltage
- Suitable for DIN-rail mounting

### Introduction

The AMAX-2750SY series consists of digital slave modules for AMONet RS-485 that extend the digital I/O capacity. All the digital I/O slave extension modules are connected serially with a simple Cat.5 cable. This reduces wiring between driver and controller and is very suitable for highly integrated machine automation applications. High speed, scalability and cost-effectiveness ensures a solid solution for machine builders. There are 3 main types of digital I/O slave modules, 32-ch digital input, 32-ch digital output, and 16/16-ch digital input/output. With these slave modules, you can connect actuators/sensors directly with minimum hassle. You can access I/O points nearby or 100 meters away using simple and low-cost wiring, and the high speed of AMONet RS-485 makes it possible to scan 2,048 I/O channels in 1.04 ms.

### Specifications

#### Isolated Digital Input

- **Channels** AMAX-2752SY: 32 (4 ports)  
AMAX-2756SY: 16 (2 ports)
- **Input Type** Dry contact
- **Isolation Protection** 2,500 V<sub>RMS</sub>
- **Opto-Isolator Response** 18  $\mu$ s
- **Input Resistance** 1 k $\Omega$  @ 0.5 W

#### Isolated Digital Output

- **Channels** AMAX-2754SY: 32 (4 ports)  
AMAX-2756SY: 16 (2 ports)
- **Output Type** Sink (NPN) (open collector Darlington transistors)
- **Isolation Protection** 2,500 V<sub>RMS</sub>
- **Output Voltage** 10 ~ 30 V<sub>DC</sub>
- **Sink Current** 150 mA/ea. for multiple-channel usage,  
total 1.1 A max. (1 port)

#### General

- **Bus Type** AMONet RS-485
- **Certification** CE, FCC Class A
- **Connectors** 2 x RJ45 and 2 x 40-pin wiring board
- **Dimensions (L x W x H)** 125 x 47.6 x 151 mm (4.9" x 1.8" x 5.9")
- **Power Consumption** AMAX-2752SY: 1.2 W typical, 5 W max.  
AMAX-2754SY: 1.2 W typical, 5 W max.  
AMAX-2756SY: 1.2 W typical, 5 W max.
- **Power Input** 24 V<sub>DC</sub> within 200 mA ripple
- **Power Supply for DIO** 10 ~ 30 V<sub>DC</sub> (Current < 2A)
- **Humidity** 5 ~ 95% RH, non-condensing (IEC 60068-2-3)
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)

### Ordering Information

- **AMAX-2752SY-AE** 32-ch Isolated Digital Input AMONet Module
- **AMAX-2754SY-AE** 32-ch Isolated Digital Output AMONet Module
- **AMAX-2756SY-AE** 16/16-ch Isolated Digital I/O AMONet Module