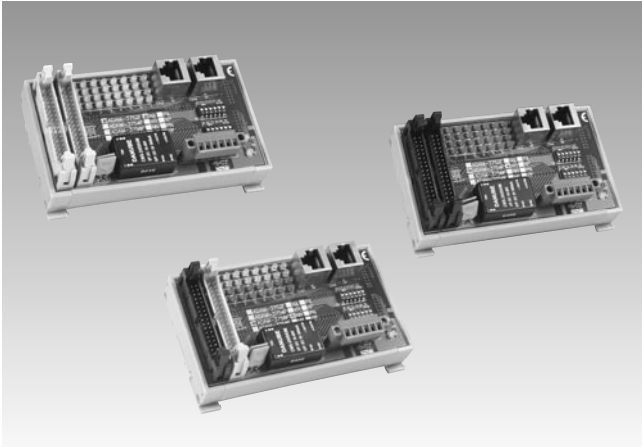


ADAM-3750F Series

Flat-Cable Type
Digital NPN I/O
Modules



ADAM-3752F

ADAM-3756F

ADAM-3754F



Features

- DIN rail mounting (L-124 x W-72 x H-53 mm)
- Max. 20 Mbps transfer rate
- Flat-Cable Connection
- Easy installation with RJ45 phone jack and LED diagnostic
- 3-wire terminal board for sensor
- LED indicator for each IO channel
- Selection of I/O-channel configuration (32 DI, 32 DO or 16/16 DI/O)
- 2500 Vrms Isolation voltage

Introduction

The ADAM-3750F Series consists of digital slave modules for AMONet™ RS-485 that extend the digital I/O capacity. All the DIO 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 DI/O slave modules, 32In, 32Out, and 16In/16Out. 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 2048 IO channels in 1.04 ms.

Specifications

Isolated Digital Input

- **Channels** ADAM-3752FN: 32, ADAM-3756FNN: 16
- **Input Voltage** Logic 0: 3 V max.
Logic 1: 12 V (30 V max.)
- **Isolation Protection** 2,500 V_{RMS}
- **Opto-Isolator Response** On to Off, about 180 μs; Off to On, about 1.2μs
- **Input Resistance** 2.4 kΩ @ 0.5 W

Isolated Digital Output

- **Channels** ADAM-3754FN: 32, ADAM-3756FNN: 16
- **Output Type** Sink (NPN) (open collector Darlington transistors)
- **Isolation Protection** 2,500 V_{RMS}
- **Output Voltage** 5~30 V_{DC}
- **Sink Current** 60 mA @ 24 V_{DC}

General

- **Bus Type** AMONet RS-485
- **Certifications** CE
- **Connectors** 2 x RJ45, 2 x 34-pin flat cable
- **Dimensions (LxWxH)** 124 x 72 x 53 mm (4.9" x 2.8" x 2.1")
- **Power Consumption** Typical: 3 W
- **Power Supply** 18 ~ 30 V_{DC}
- **Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)

Ordering Information

- **ADAM-3752FN** Flat-cable type 32-CH Digital NPN Input Module
- **ADAM-3754FN** Flat cable type 32-CH Digital NPN Output Module
- **ADAM-3756FNN** Flat cable, 16/16CH Digital NPN In/Output Module
- **ADAM-3934D** Dual 34-pin wiring terminal with DIN-rail
- **PCL-10134-1** 34-pin IDC flat cable, 1M

Pin Assignments

ADAM-3754F							
CN1				CN2			
Pin	Label	Pin	Label	Pin	Label	Pin	Label
1	OUT_00	2	+24V	1	OUT_20	2	+24V
3	OUT_01	4	GND	3	OUT_21	4	GND
5	OUT_02	6	+24V	5	OUT_22	6	+24V
7	OUT_03	8	GND	7	OUT_23	8	GND
9	OUT_04	10	+24V	9	OUT_24	10	+24V
11	OUT_05	12	GND	11	OUT_25	12	GND
13	OUT_06	14	+24V	13	OUT_26	14	+24V
15	OUT_07	16	GND	15	OUT_27	16	GND
17	OUT_08	18	+24V	17	OUT_28	18	+24V
19	OUT_09	20	GND	19	OUT_29	20	GND
21	OUT_10	22	+24V	21	OUT_30	22	+24V
23	OUT_11	24	GND	23	OUT_31	24	GND
25	OUT_12	26	+24V	25	OUT_32	26	+24V
27	OUT_13	28	GND	27	OUT_33	28	GND
29	OUT_14	30	+24V	29	OUT_34	30	+24V
31	OUT_15	32	GND	31	OUT_35	32	GND
33	FG	34	FG	33	FG	34	FG

ADAM-3752F							
CN1				CN2			
Pin	Label	Pin	Label	Pin	Label	Pin	Label
1	IN_00	2	+24V	1	IN_20	2	+24V
3	IN_01	4	GND	3	IN_21	4	GND
5	IN_02	6	+24V	5	IN_22	6	+24V
7	IN_03	8	GND	7	IN_23	8	GND
9	IN_04	10	+24V	9	IN_24	10	+24V
11	IN_05	12	GND	11	IN_25	12	GND
13	IN_06	14	+24V	13	IN_26	14	+24V
15	IN_07	16	GND	15	IN_27	16	GND
17	IN_08	18	+24V	17	IN_28	18	+24V
19	IN_09	20	GND	19	IN_29	20	GND
21	IN_10	22	+24V	21	IN_30	22	+24V
23	IN_11	24	GND	23	IN_31	24	GND
25	IN_12	26	+24V	25	IN_32	26	+24V
27	IN_13	28	GND	27	IN_33	28	GND
29	IN_14	30	+24V	29	IN_34	30	+24V
31	IN_15	32	GND	31	IN_35	32	GND
33	FG	34	FG	33	FG	34	FG

ADAM-3756							
CN1				CN2			
Pin	Label	Pin	Label	Pin	Label	Pin	Label
1	IN_00	2	+24V	1	OUT_00	2	+24V
3	IN_01	4	GND	3	OUT_01	4	GND
5	IN_02	6	+24V	5	OUT_02	6	+24V
7	IN_03	8	GND	7	OUT_03	8	GND
9	IN_04	10	+24V	9	OUT_04	10	+24V
11	IN_05	12	GND	11	OUT_05	12	GND
13	IN_06	14	+24V	13	OUT_06	14	+24V
15	IN_07	16	GND	15	OUT_07	16	GND
17	IN_08	18	+24V	17	OUT_08	18	+24V
19	IN_09	20	GND	19	OUT_09	20	GND
21	IN_10	22	+24V	21	OUT_10	22	+24V
23	IN_11	24	GND	23	OUT_11	24	GND
25	IN_12	26	+24V	25	OUT_12	26	+24V
27	IN_13	28	GND	27	OUT_13	28	GND
29	IN_14	30	+24V	29	OUT_14	30	+24V
31	IN_15	32	GND	31	OUT_15	32	GND
33	FG	34	FG	33	FG	34	FG