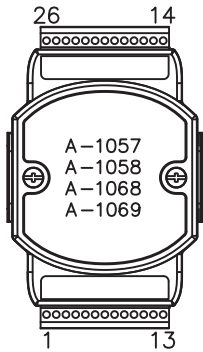


# A-1057 / 1058 / 1068 / 1069



## Features

- Din-Rail
- Operating Temperatures : -20 °C ~ +75 °C
- Input Power : +10VDC ~ +30VDC
- Isolation Protection ; 3000VDC
- Protocol : Modbus-RTU / Modbus-ASCII
- Output LED Indicator

## Introduction

The A series is a family of network data acquisition and control modules that support Modbus RTU and Modbus ASCII protocols. A series can easily communicate with most popular SCADA/ HMI software and PLC.

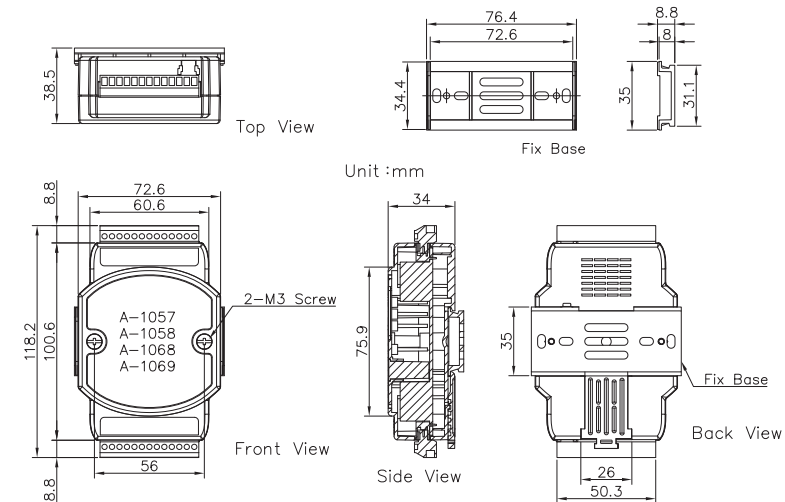
## Pin Assignments

A 1057 / 58		A 1068 / 69		A 1057 / 58		A 1068		A 1069	
Item	Pin Assignment	Item	Pin Assignment	Item	Pin Assignment	Item	Pin Assignment	Item	Pin Assignment
1	DO 7~9 COM	RL5 NO	14	DO 0~2 COM	RL0 NO	RL0 NO			
2	DO 7	RL5 COM	15	DO 0	RL0 COM	RL0 COM			
3	DO 8	RL5 NC	16	DO 1	RL0 NC	NC			
4	DO 9	RL6 NO	17	DO 2	RL1 NO	RL1 NO			
5	DO 7~9 GND	RL6 COM	18	DO 0~2 GND	RL1 COM	RL1 COM			
6	DO 10~11 COM	RL6 NC	19	DO 3~4 COM	RL1 NC	NC			
7	DO 10	RL7 NO	20	DO 3	RL2 NO	RL2 NO			
8	DO 11	RL7 COM	21	DO 4	RL2 COM	RL2 COM			
9	DO 10~11 GND	RL7 NC	22	DO 3~4 GND	RL2 NC	RL3 NO			
10	( Y )DATA +	( Y )DATA +	23	DO 5~6 COM	RL3 COM	RL3 COM			
11	( G )DATA -	( G )DATA -	24	DO 5	RL3 NO	NC			
12	( R )+VS	( R )+VS	25	DO 6	RL4 COM	RL4 NO			
13	( B )GND	( B )GND	26	DO 5~6 GND	RL4 NO	RL4 COM			

## Specifications

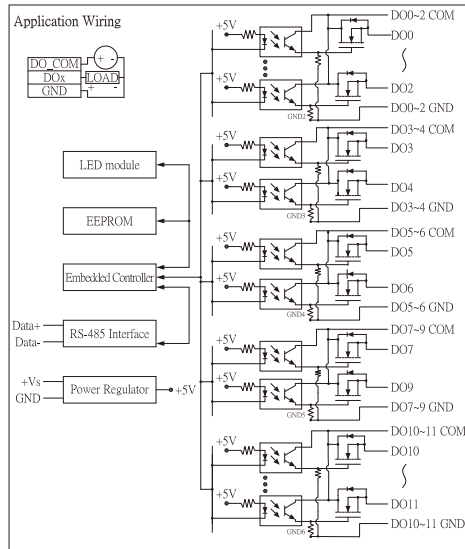
Interface				
	A 1057	A 1058	A 1068	A1069
Output Channels	12	12	8	8
Connectors	2 X plug-in terminal blocks (#14~28 AWG)			
Power Consumption	0.96W@24VDC	0.96W@24VDC	1.68W@24VDC	2.88W@24VDC
Supported Protocols	Modbus-RTU/Modbus-ASCII			
Output Type	Source	Sink	Relay	Power Relay
Output Isolation Voltage	3000VDC			
LED Indicators	Yes			
Output Rating (max)	10~35VDC / 1A	40VDC / 200mA (Open Collector)	0.5A@120VAC / 1A@30V	5A@250V / 5A@30VDC
Channel Type	Digital	Digital	6X form C / 2X form A	3X form C / 5X form A
Output off Time	<1ms	<1ms	<8ms	<8ms
Output on Time	<1ms	<1ms	<7ms	<7ms
Power on Set Value	Yes (Power on Output Set Value)			
Communication Fail Set Value	Yes (Force the DO channels to safety status when communication in time-out and over pre-defined period)			
Casing				
Mechanical	Plastic			
Flammability	Fire Retardant Materials			
Dimensions (W x H x D)	118.2 mm x 76.4 mm x 38.5 mm			
Installation	DIN-Rail			
Environment				
Operating Temperature	-20°C ~ +75°C			
Storage Temperature	-25°C ~ +80°C			
Humidity	10 ~ 90% RH, non-condensing			

## A 1057 / 58 / 68 / 69 Dimension

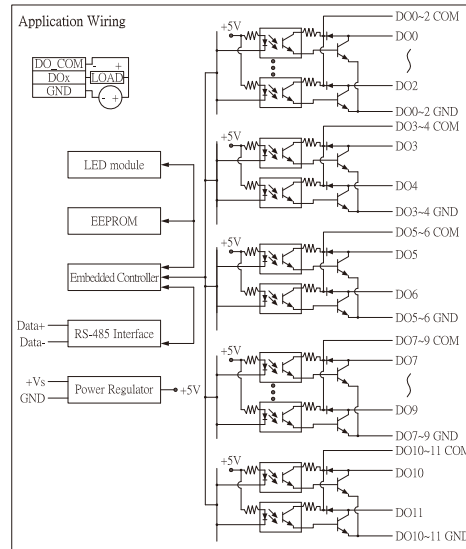


# Block Diagram

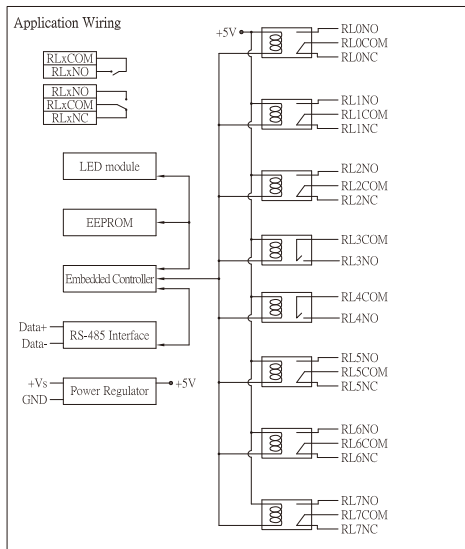
A-1057(Source)



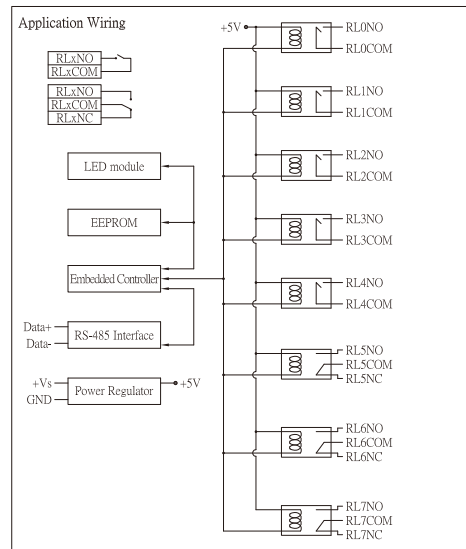
A-1058(Sink)



A-1068(Relay)



A-1069(Power Relay)



# RAM Table

Address	Description	NOR	INIT*	NOTE
<b>Supported Modbus Code: 01/02/05/15</b>				
00017~00032	0~15 Digital Output Value	R/W	R/W	(0/1)
<b>Supported Modbus Code: 01/02/05/15</b>				
00033~00048	0~15 Power On Digital Output Value	R	R/W	(0/1)
00049~00064	0~15 Communication Fail Safe Value	R	R/W	(0/1)
<b>Supported Modbus Code: /03/04/06/16</b>				
40065	Communication Fail Safe Time Setting Value (0.0~6553.5 sec)	R	R/W	0.0 disables 40215, otherwise enables, 40215 Update 40215 automatically
<b>Supported Modbus Code: 03/04</b>				
40211	Module Name 1			AR-1501D S Ex : 0x15 0x01
40212	Module Name 2			AR-1501D Ex : 0x44 0x00
40213	Soft Version 1			A1.00 Ex : 0xA1 0x00
40214	Soft Version 2			0x00 0x00
40215	Communication Safety Enabled	R	R	Enable the function of communication detection (Geared to 40065), 0x00 : Disabled 0x01 : Enabled
40216	Communication Safety Flag			When the module's idle time exceeds Comm. Fail Safe Time, this flag is set to 1. The moment of PC will be recorded. When this flag is read, it is set to 0.
<b>Supported Modbus Code: 03/04/06</b>				
40300	Module's ID in normal mode			01~255
40301	Protocol in normal mode			0x00 : RTU 0x01 : ASCII
40302	Baud rate in normal mode	R	R/W	0x00 : 1200 0x01 : 2400 0x02 : 4800 0x03 : 9600 0x04 : 14400 0x05 : 19200 0x06 : 28800 0x07 : 38400 0x08 : 57600 0x09 : 115200
40303	Parity option in normal mode			0x00 : None 0x01 : Odd 0x02 : Even
40304	Stop bits in normal mode			0x00 : 1 bit 0x01 : 2 bit

# Ordering Information

- A-1057 / 1058 / 1068 / 1069