

DAM-3011D

User's Manual



Beijing ART Technology Development Co., Ltd.

DAM-3011D Module

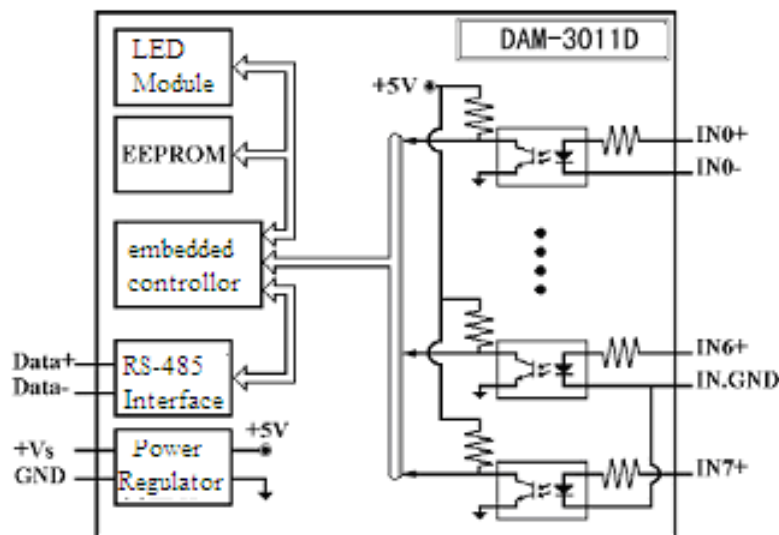
Features

8-channel Isolated Digital Input Module

- Input Mode: 6DI, 2SEor 8DI
- Input High-level: +4V~+30V
- Input Low-level: 0~+1V
- Isolation Voltage:5000V
- Input Impedance: 3KΩ
- Input Channel can be used as counter (100Hz)
- Built-in Watchdog
- LED indicate the input state
- Power Supply: unregulated +10~+30V_{DC}
- Power Consumption: 0.5W@24V_{DC}

Industrial Design

DAM-3011D was designed to use in industrial environment. It can be installed in standard DIN rail inside the cabinet. And it can be powered by unregulated 10V_{DC} ~30V_{DC} to meet the various power supplied source in field. It also withstands ambient temperature up to 60°C and resists the effects of vibration and mechanical shock.



Wiring & Installation

Power supply requirements: unregulated +10V_{DC} ~ +30 V_{DC}. "+Vs" is a positive, and "GND" is ground. "DATA +" and "DATA-" connect with "DATA +" and "DATA-"(or "A" and "B") of RS-232/RS-485

transformation module, then connect transformation module with computer, do not hot plug carefully. The power indicator flashes after wiring is correct, then you can communication with the host computer.

According to the label directs color to wiring:

- | | |
|---------------|------------------|
| +Vs (R) Red | DATA+ (Y) Yellow |
| GND (B) Black | DATA- (G) Green |

DAM-3011D

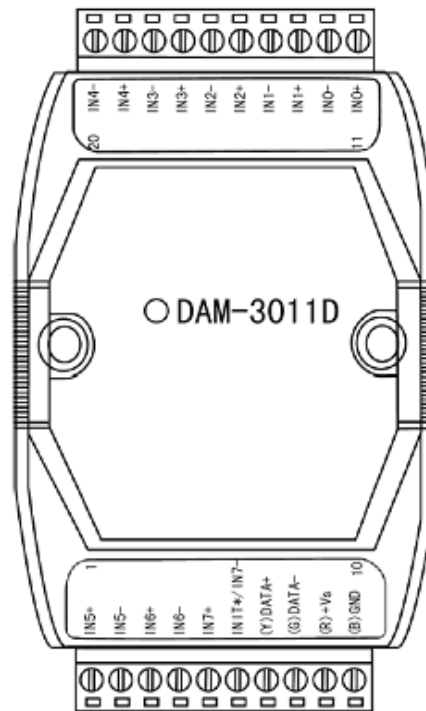


Fig. 1 DAM-3011D Drawing

DAM-3011D can be installed in standard DIN rail inside the cabinet, it also can be installed by stacking mode.

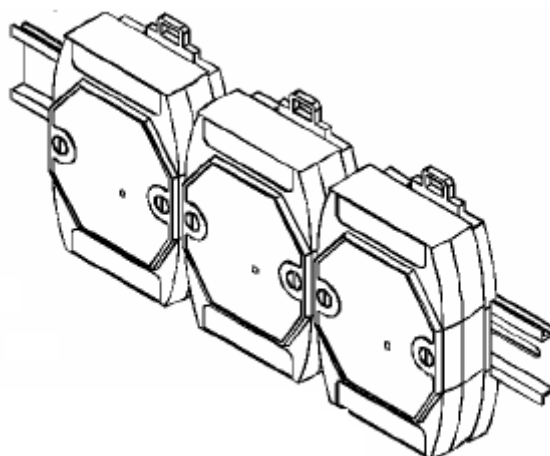


Fig.2 standard DIN installation

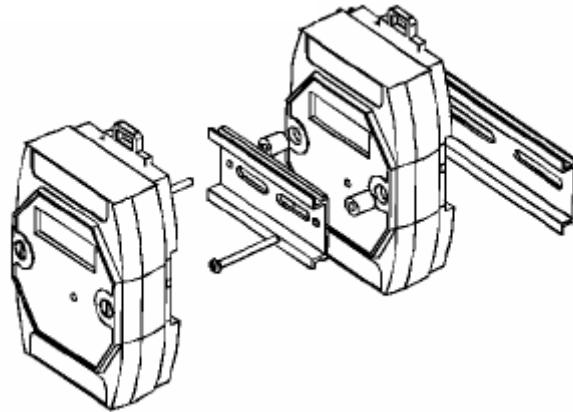


Fig.3 stack installation

Jumper Setting

Jumper JP1 for select the pin INIT*/IN7-

Select 8 differential inputs mode, the pin INIT*/IN7- is set to IN7-



Select INIT* mode, the pin INIT*/IN7- is set to INIT*



Wiring Application

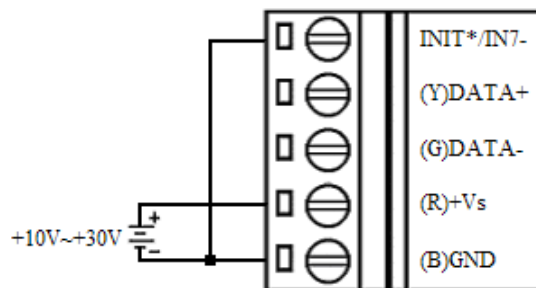
Reset Connection:

Select INIT* mode, and shorted the INIT * and GND shorted, add +10 ~ +30 VDC between +Vs and GND, power on, the module indicator quickly flashes three times, power off until the indicator stops flashing, disconnect the INIT * and GND, then reset the module has been completed.

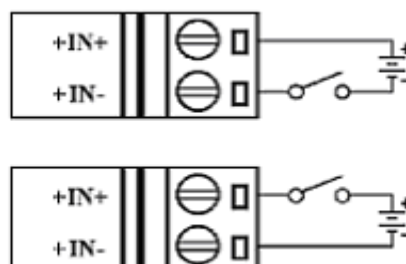
After reset successfully, the module restore the factory default values:

Module Address: 1

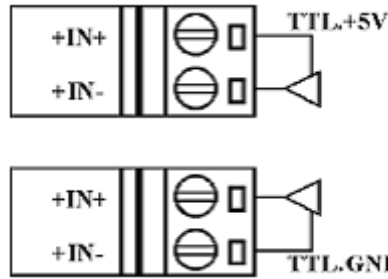
Baud Rate: 9600



Wet Contact Connection



TTL/CMOS Signal Input



Open-collector Signal Input

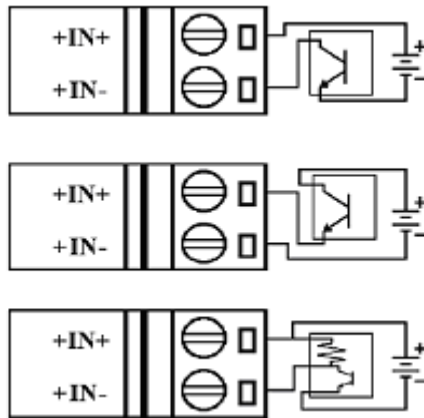


Fig.6

Default Setting

If the module’s address or baud rate is wrong, or forget the last modified value, the module can be reverted to default settings. Steps: Short-circuit the “INIT*” and “GND” when there is no power; power-on for 3 seconds, power off, disconnect “INIT*” and “GND”. The module is reverted to the default settings.

- 🚩 Address: 00
- 🚩 Baud Rate :9600bps
- 🚩 Noparity
- 🚩 The serial port default work mode: parity bit: none
data bits: 8
stop bit: 1

Code Configuration Table

Baud Rate Configuration Code Table

Code	00	01	02	03	04	05	06	07
Rate	1200	2400	4800	9600	19200	38400	57600	115200

Pin Definition

Pin	Name	Function
1	IN5+	Digital input 5-ch (+)
2	IN5-	Digital input 5-ch (-)
3	IN6+	Digital input 6-ch (+)

4	IN6-	Digital input 6-ch (-)
5	IN7+	Digital input 7-ch (+)
6	INIT*/IN7-	reset pin, connect with (B)GND, then power-on to reset/ when differential input, it is digital input 7-ch (-)
7	(Y)DATA+	RS-485 positive
8	(G)DATA-	RS-485 negative
9	(R)+Vs	DC Power Supply (+), +10~+30V _{DC}
10	(B)GND	DC Power Supply (-)
11	IN0+	Digital input 0-ch (+)
12	IN0-	Digital input 0-ch (-)
13	IN1+	Digital input 1-ch (+)
14	IN1-	Digital input 1-ch (-)
15	IN2+	Digital input 2-ch (+)
16	IN2-	Digital input 2-ch (-)
17	IN3+	Digital input 3-ch (+)
18	IN3-	Digital input 3-ch (-)
19	IN4+	Digital input 4-ch (+)
20	IN4-	Digital input 4-ch (-)