DAM-3012D
User's Manual

Beijing ART Technology Development Co., Ltd.

DAM-3012D Module

Features

8-channel Isolated Digital Input Module

➢   Input Mode:14 single-ended inputs (common cathode or common anode)

➢   Input High-level: +4V~+30V

➢   Input Low-level: 0~+1V

➢   Isolation Voltage:3750V

➢   Input Channel can be used as counter (100Hz)

➢   Built-in Watchdog

➢   LED indicate the input state

➢   Power Supply: unregulated +10~+30V$_{DC}$

➢   Power Consumption: 0.6W@24V$_{DC}$

Industrial Design
DAM-3012D 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℃ and resists the effects of vibration and mechanical shock.
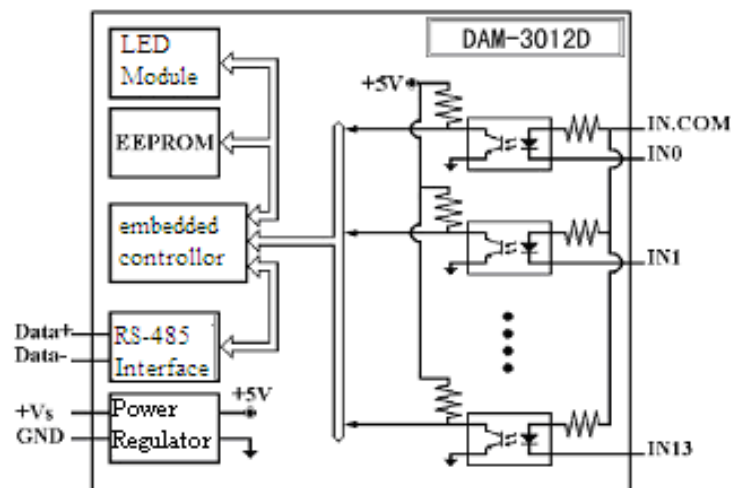
Wiring & Installation

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

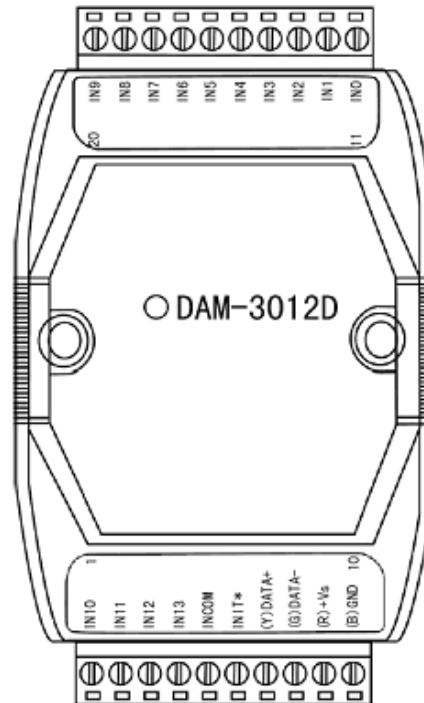GND（B） Black   DATA- （G） Green

DAM-3012D

Fig. 1 DAM-3012D Drawing

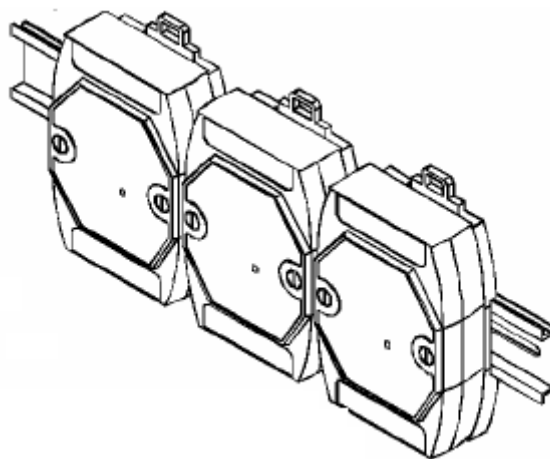DAM-3012D can be installed in standard DIN rail inside the cabinet, it also can be installed by stacking mode.
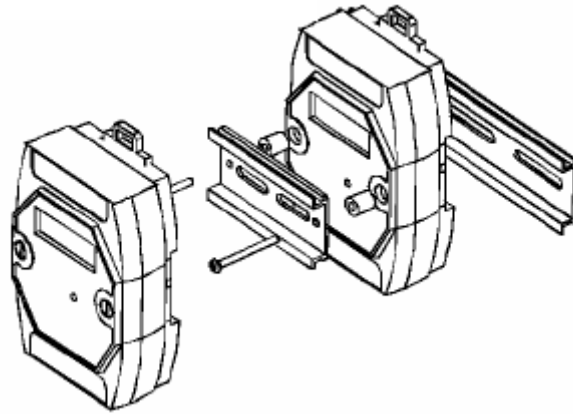

Fig.2 standard DIN installation

Fig.3 stack installation

Wiring Application

Reset Connection:

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.
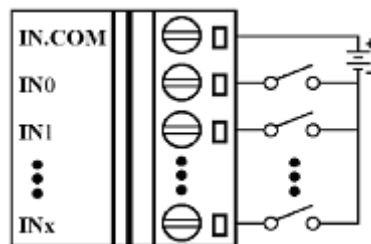
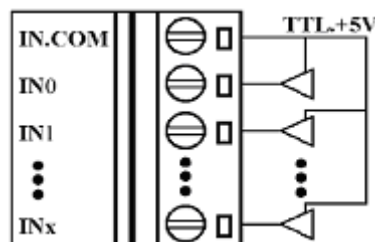After reset successfully, the module restore the factory default values:
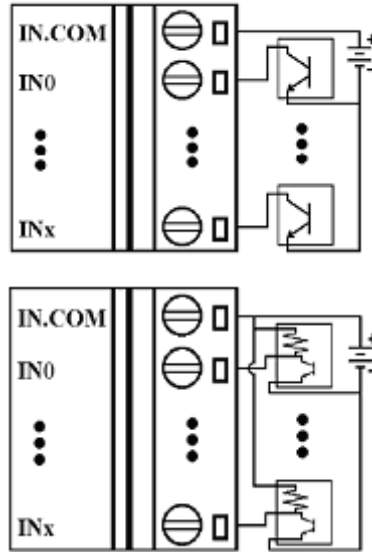
Module Address: 1

Baud Rate: 9600
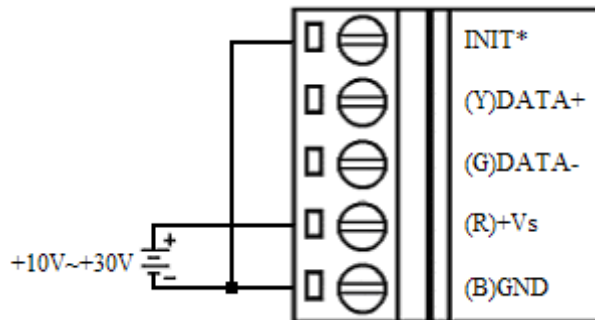
Wet Contact Connection

TTL/CMOS Signal Input

Open-collector Signal Input

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	IN10	Digital input 10-ch
2	IN11	Digital input 11-ch
3	IN12	Digital input 12-ch
4	IN13	Digital input 13-ch
5	IN.COM	Digital input common terminal
6	INIT*	reset pin, connect with(B)GND, then power-on to reset
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	IN1	Digital input 1-ch
13	IN2	Digital input 2-ch
14	IN3	Digital input 3-ch
15	IN4	Digital input 4-ch
16	IN5	Digital input 5-ch
17	IN6	Digital input 6-ch
18	IN7	Digital input 7-ch
19	IN8	Digital input 8-ch
20	IN9	Digital input 9-ch