# DAM-3025D
# User's Manual

Beijing ART Technology Development Co., Ltd.

# DAM-3025D Module

## Introduction

Features

4-channel Isolated Digital Input/ 8-channel Open-collector Output Module

- Input: 4SE (common cathode / anode)

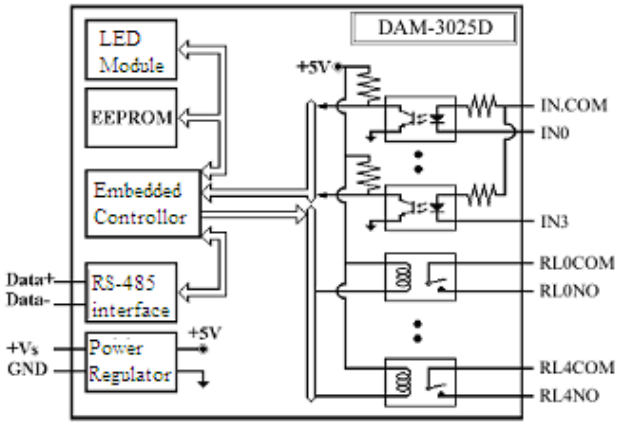
  High Level: 4V~30V

  Low Level: 0V~1V

- Output: 8-channel Open-collector
- Isolated Voltage: 3750V
- Max Load:30V, 100mA
- Support dual watchdogs
- LED indicate input/output status
- Power Supply: unregulated +10～+30$V_{DC}$
- Power Consumption:1.37W@24$V_{DC}$

Industrial Design

DAM-3025D 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 10$V_{DC}$ ~30$V_{DC}$ 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 +10$V_{DC}$ ~ +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-3025D

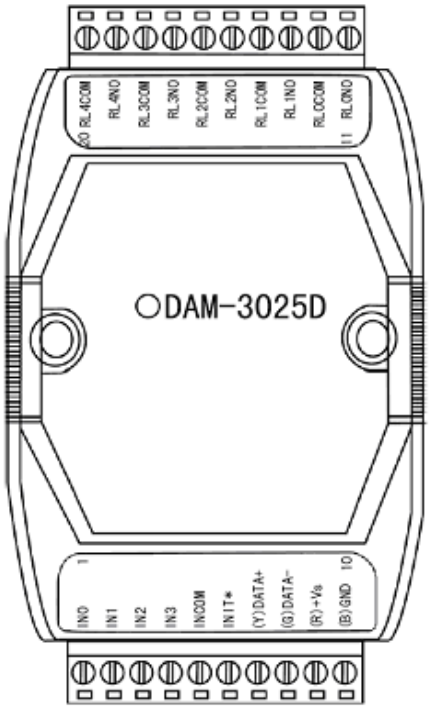



Fig. 1 DAM-3025D Drawing

DAM-3025D can be installed in standard DIN rail inside the cabinet, it also can be installed by stacking mode.

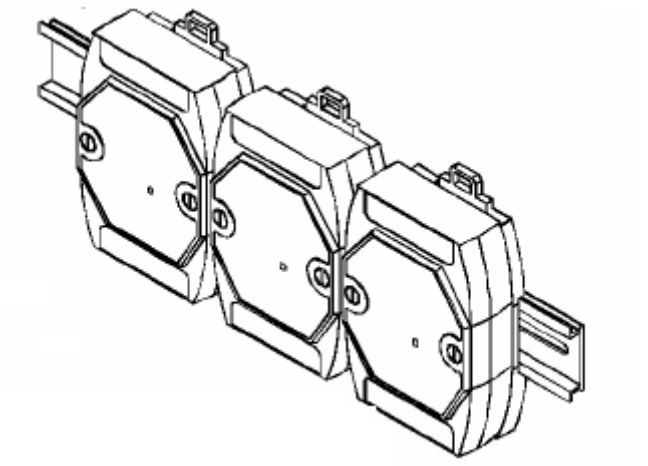


Fig.2 standard DIN installation

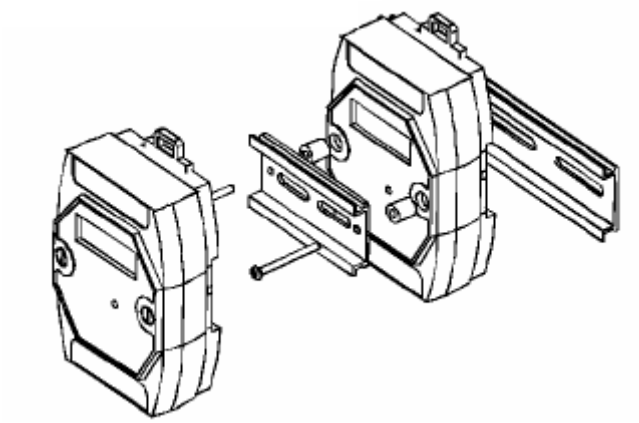


Fig.3 stack installation

## Wiring Application

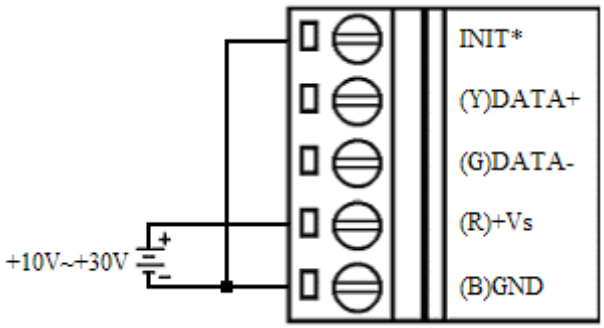
Reset Connection:

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.

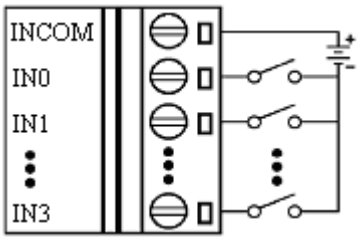
After reset successfully, the module restore the factory default values:

Module Address: 1

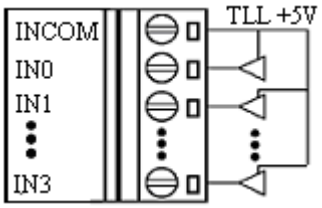
Baud Rate: 9600



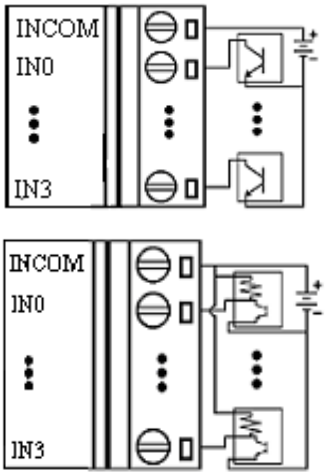

Wet Contact Signal input



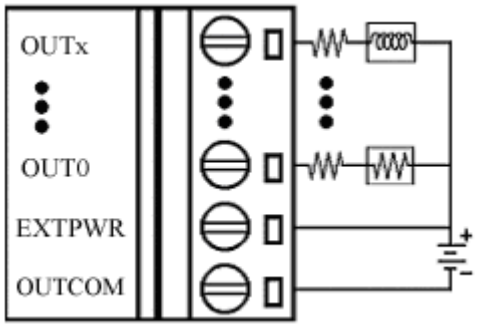

TTL/CMOS Signal Input



Open-collector Signal Input




Open-collector Output




## 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 | IN0 | Digital input 0-ch |
| 2 | IN1 | Digital input 1-ch |

| | | |
|---|---|---|
| 3 | IN2 | Digital input 2-ch |
| 4 | IN3 | Digital input 3-ch |
| 5 | INCOM | 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~+30$V_{DC}$ |
| 10 | (B)GND | DC Power Supply (-) |
| 11 | RL0N0 | Relay output 0-ch |
| 12 | RL0COM | The common terminal of relay output 0-ch |
| 13 | RL1NO | Relay output 1-ch |
| 14 | RL1COM | The common terminal of relay output 1-ch |
| 15 | RL2NO | Relay output 2-ch |
| 16 | RL2COM | The common terminal of relay output 2-ch |
| 17 | RL3NO | Relay output 3-ch |
| 18 | RL3COM | The common terminal of relay output 3-ch |
| 19 | RL4NO | Relay output 4-ch |
| 20 | RL4COM | The common terminal of relay output 4-ch |