

DAM-3015D

User's Manual



Beijing ART Technology Development Co., Ltd.

DAM-3015D Module

Introduction

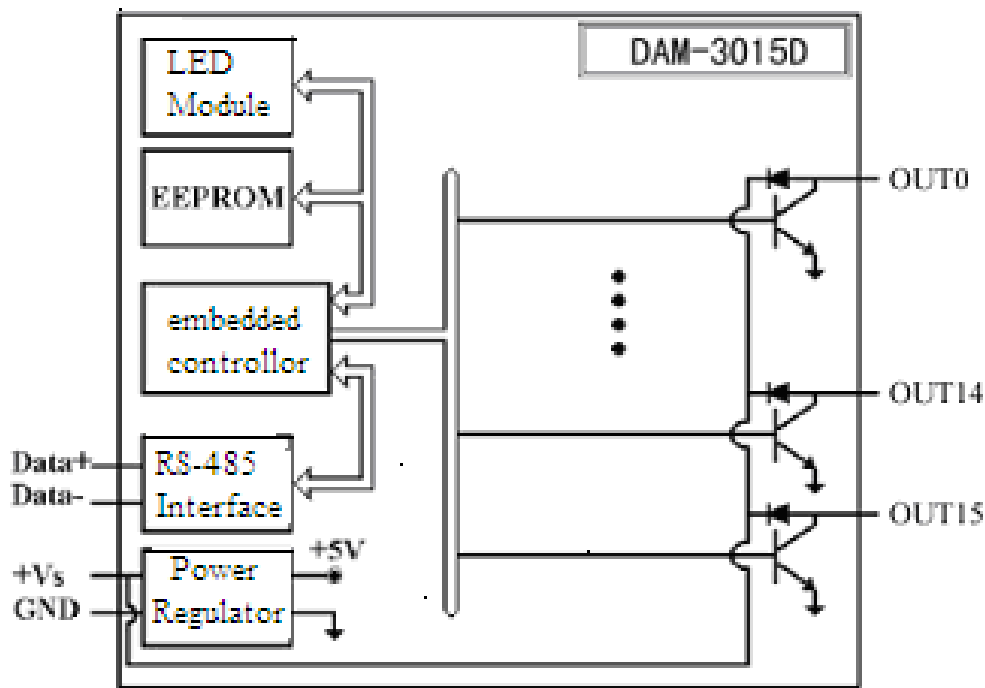
Features

16-channel Digital Output Module

- Digital Output Mode:16-channel TTL
- Support double watchdogs
- LED indicate the output state
- Power Supply: unregulated +10~+30V_{DC}
- Power Consumption: 0.7W@24V_{DC}

Industrial Design

DAM-3015D 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.



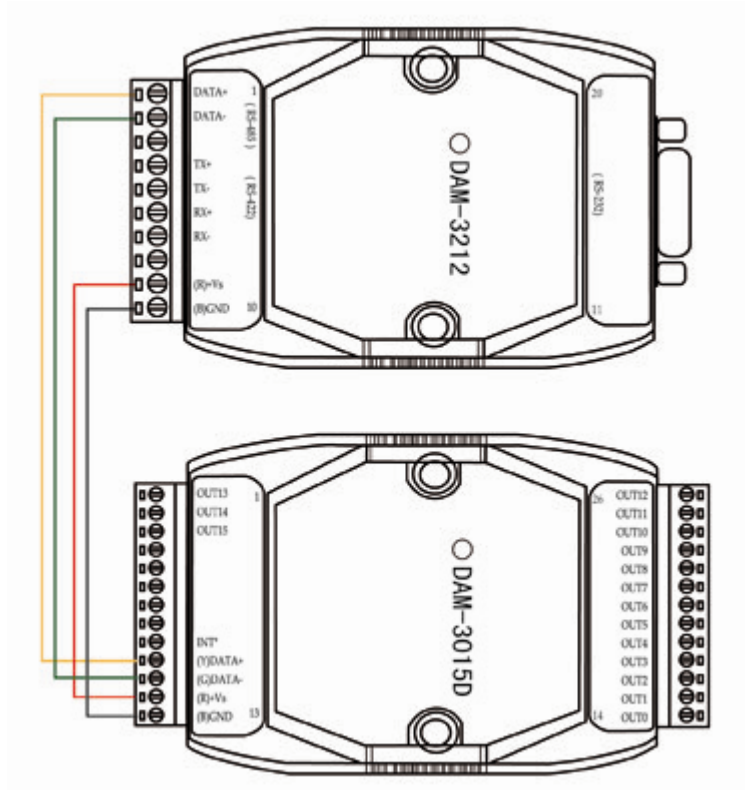
Wiring & Installation

Power supply requirements: unregulated +10V_{DC} ~ +30 V_{DC}. "+V_s" 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
- GND (B) Black
- DATA+ (Y) Yellow
- DATA- (G) Green

It can connect with DAM-3212, show as the following:



DAM-3015D

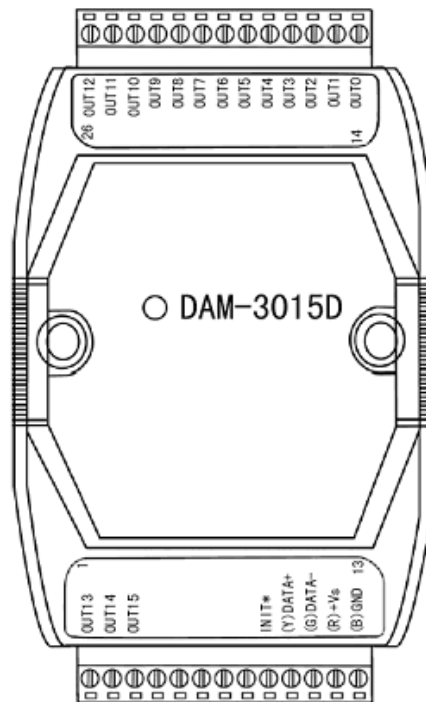


Fig. 1 DAM-3015D Drawing

DAM-3015D can be installed in standard DIN rail inside the cabinet, it also can be installed by stacking mode.

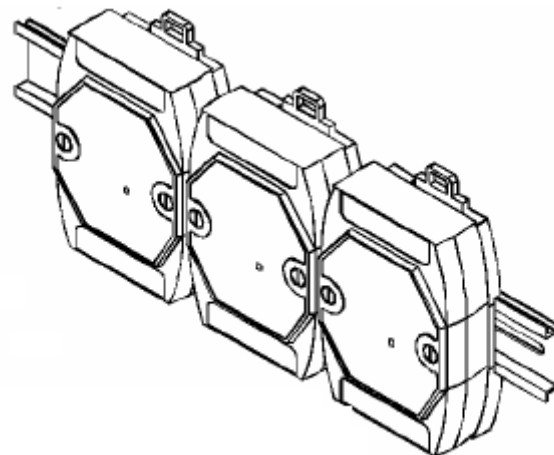


Fig.2 standard DIN installation

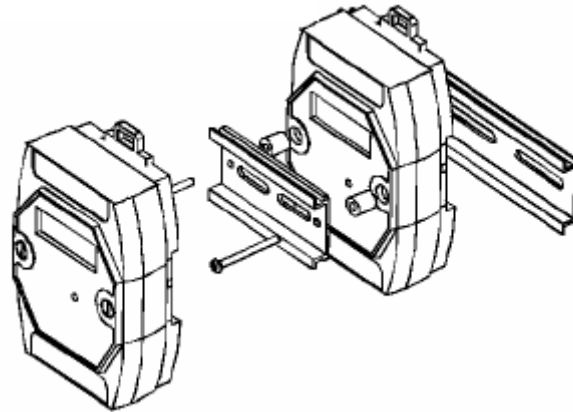


Fig.3 stack installation

Wiring Application

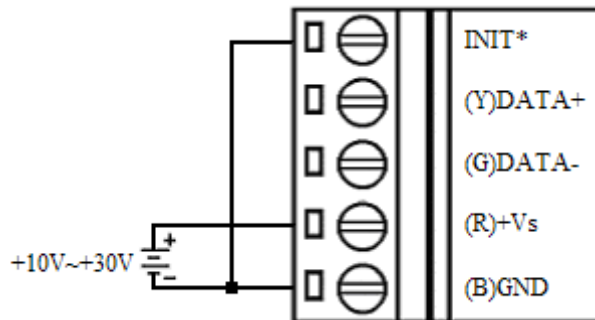
Reset Connection:

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.

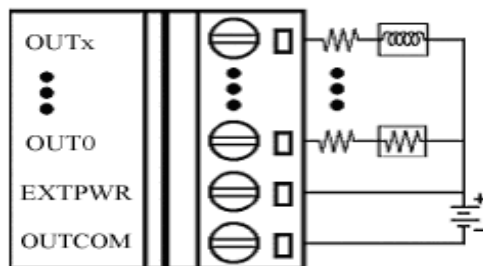
After reset successfully, the module restore the factory default values:

Module Address: 1

Baud Rate: 9600

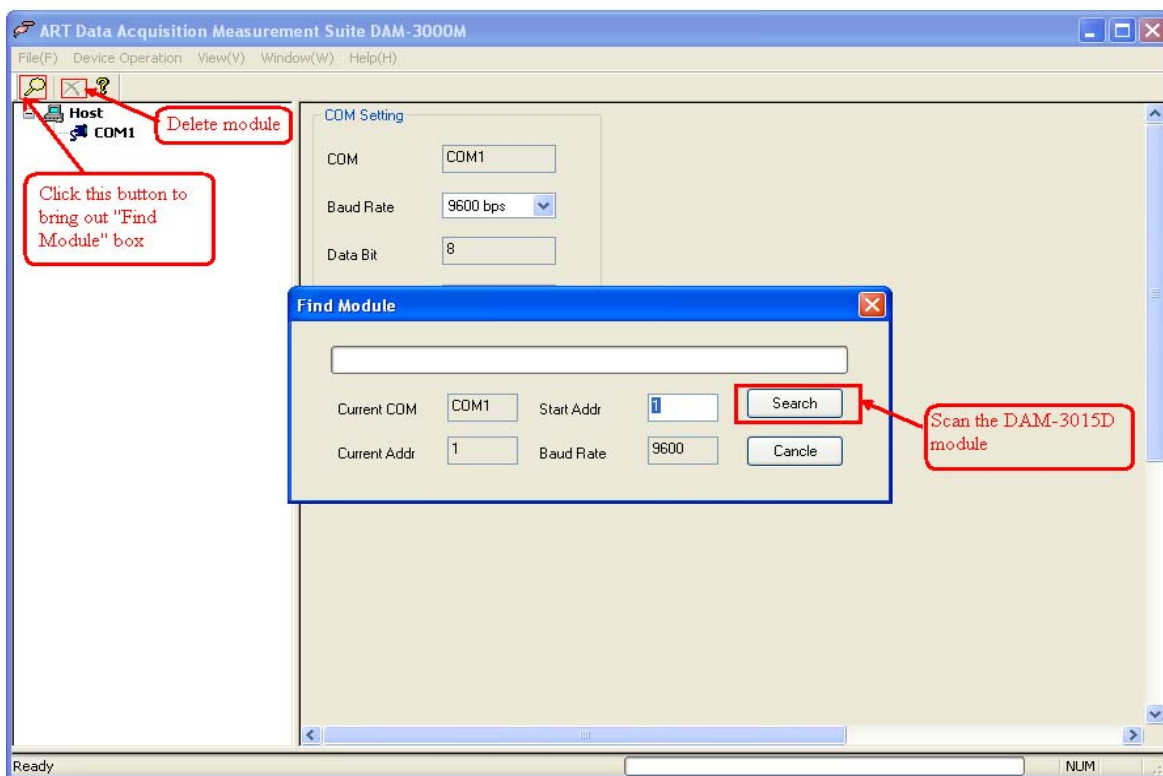
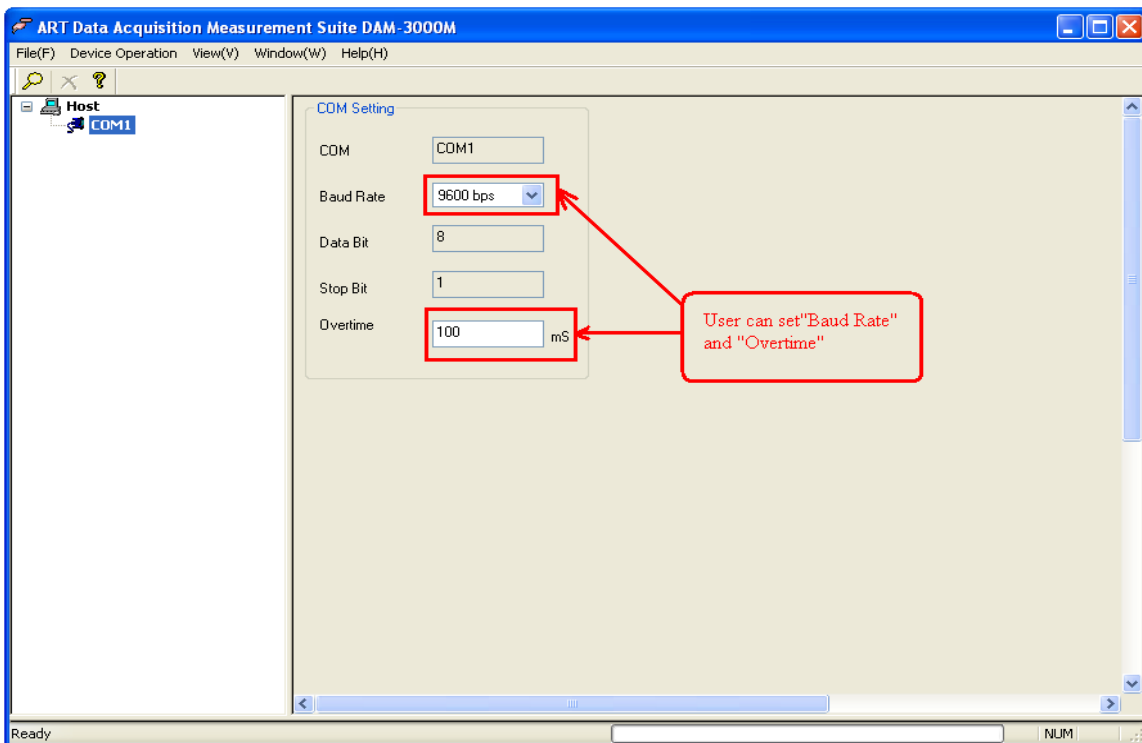


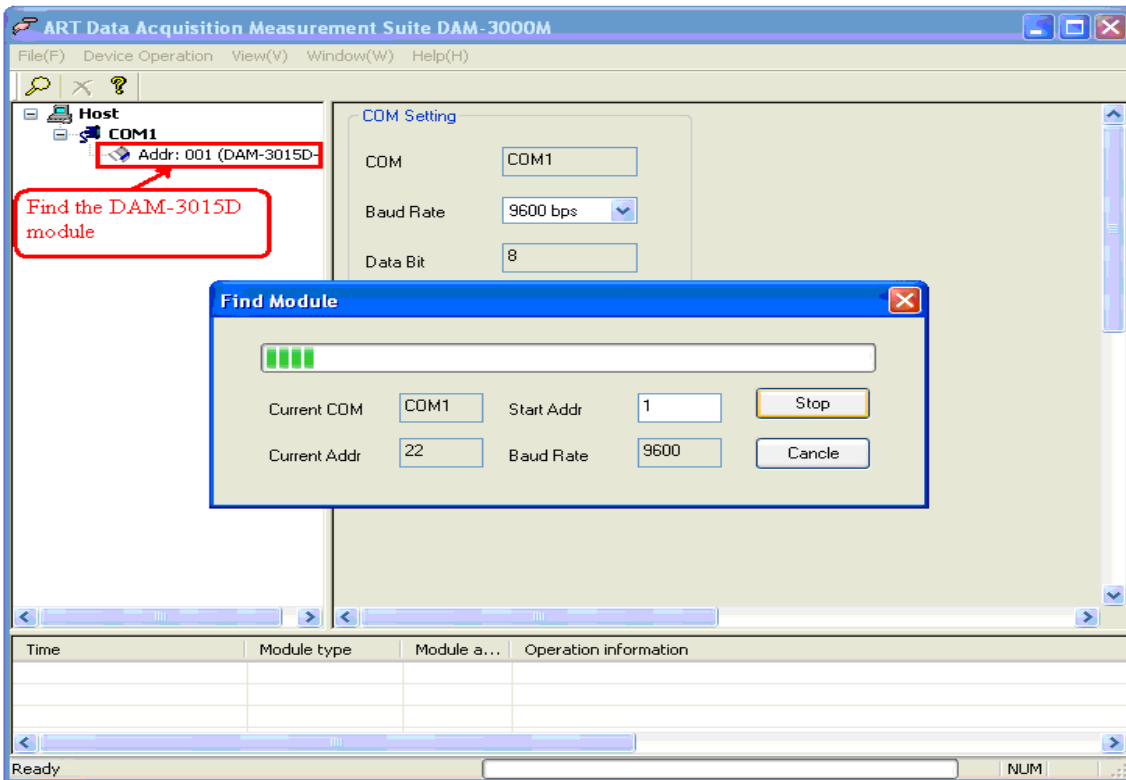
TTL Output Connection



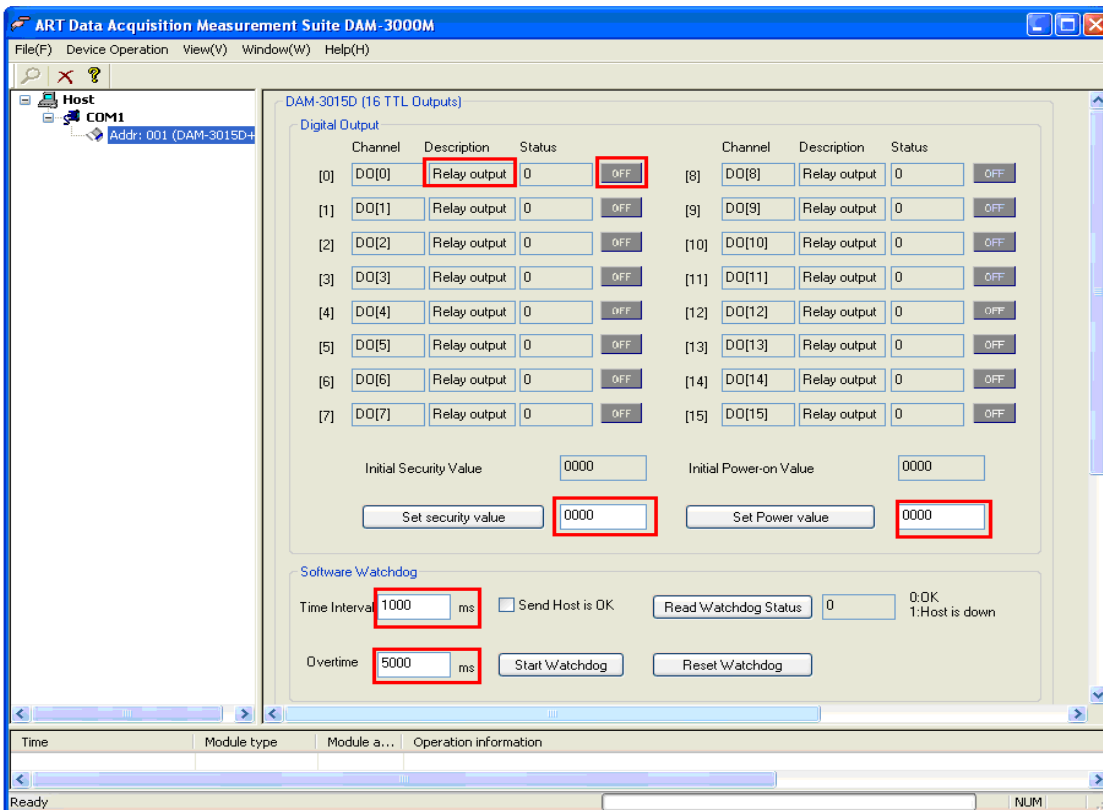
Operation Interface

Open the DAM-3000 Software, clicking the "COM1" in the system tree of left dialog block

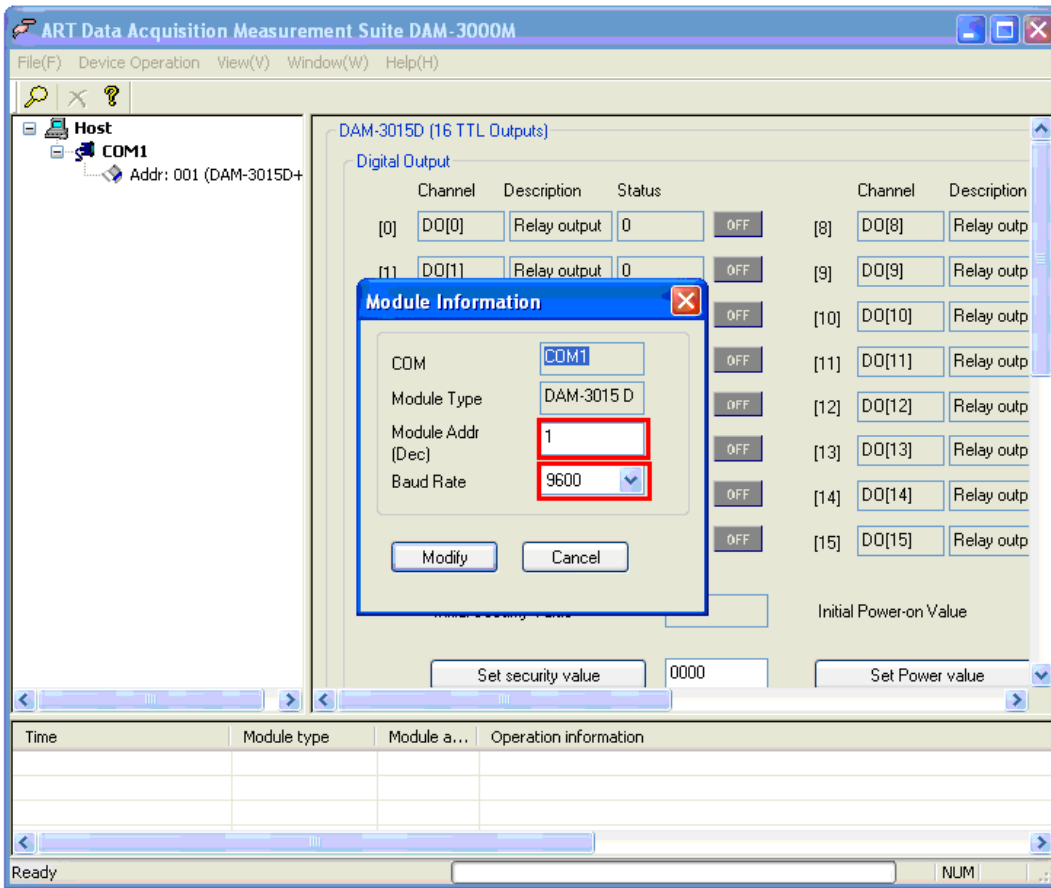




Clicking the “Addr: 001 (DAM-3015D)” in the system tree of left dialog block to go to DAM-3015D configuration page. In this page, user can configure the output channel.



Doubleclicking the “Addr: 001 (DAM-3015D)” in the system tree of left dialog block to get “Module Information” box, in this box, we can set “Module Addr” and “Baud Rate”.



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	OUT13	Digital output 13-ch
2	OUT14	Digital output 14-ch
3	OUT15	Digital output 15-ch
4~8		NC
9	INIT*	reset pin, connect with(B)GND, then power-on to reset
10	(Y)DATA+	RS-485 positive
11	(G)DATA-	RS-485 negative
12	(R)+Vs	DC Power Supply (+),+10~+30V _{DC}
13	(B)GND	DC Power Supply (-)
14	OUT0	Digital output 0-ch
15	OUT1	Digital output 1-ch
16	OUT2	Digital output 2-ch
17	OUT3	Digital output 3-ch
18	OUT4	Digital output 4-ch
19	OUT5	Digital output 5-ch
20	OUT6	Digital output t 6-ch
21	OUT7	Digital output 7-ch
22	OUT8	Digital output 8-ch
23	OUT9	Digital output 9-ch
24	OUT10	Digital output 10-ch
25	OUT11	Digital output 11-ch
26	OUT12	Digital output 12-ch