DAM-3060C
User's Manual

Beijing ART Technology Development Co., Ltd.

DAM-3060C Module

Introduction

Features
4-CH analog output module

- ✧ Input Type: mA
- ✧ Output Range: 0~20mA, 4~20mA
- ✧ Resolution: 12-bit
- ✧ Accuracy: ±0.2%
- ✧ Current Load Resistor:
  Internal power: 500Ω
  External 24V power: 1050Ω
- ✧ Zero Drift: ±0.2μV/℃
- ✧ Temperature Coefficient:±25ppm/℃
- ✧ Programmable Output Rate
- ✧ Isolation Voltage: 3000V_{DC}
- ✧ Support Double Watchdogs
- ✧ Power Supply: unregulated +10 V_{DC} ~ +30 V_{DC}
- ✧ Power consumption: 2.4W @ 24V_{DC}

Industrial Design
DAM-3060C 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-3060C

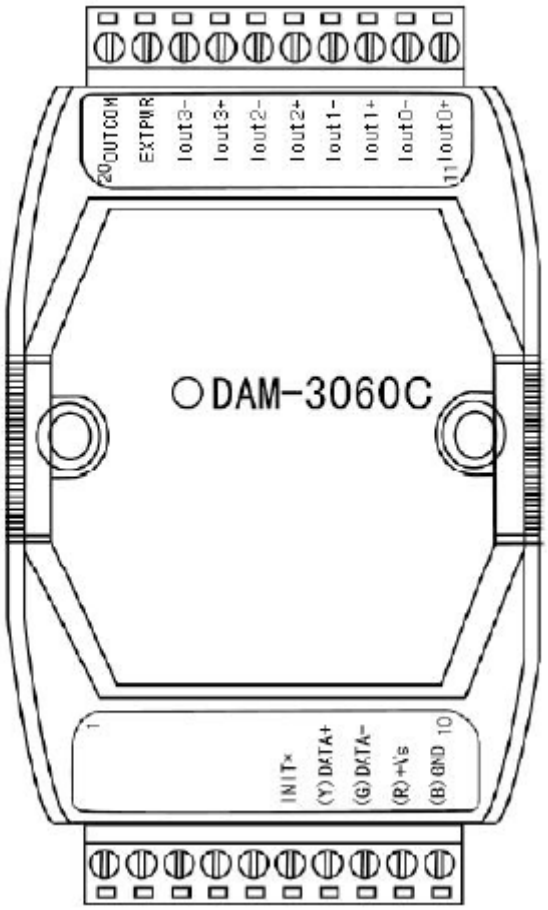


Fig. 1 DAM-3060C Drawing

DAM-3060C can be installed in standard DIN rail inside the cabinet, it also can be installed by stacking mode.

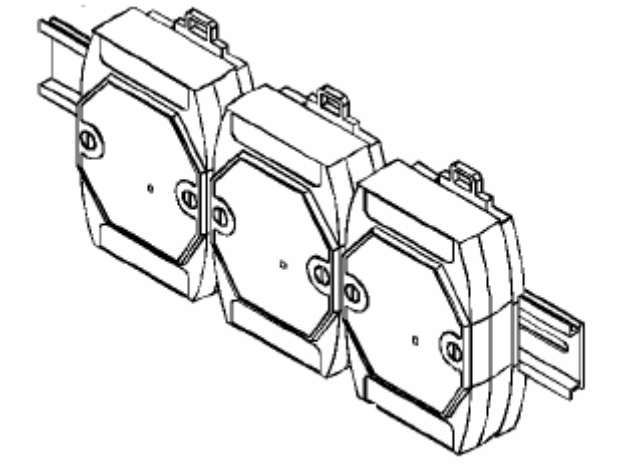


Fig.2 standard DIN installation

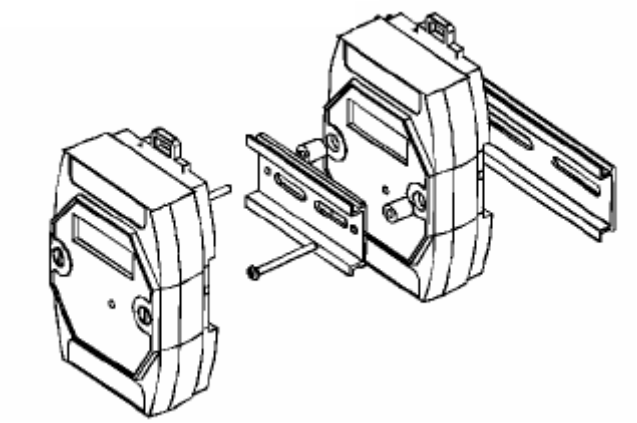


Fig.3 stack installation

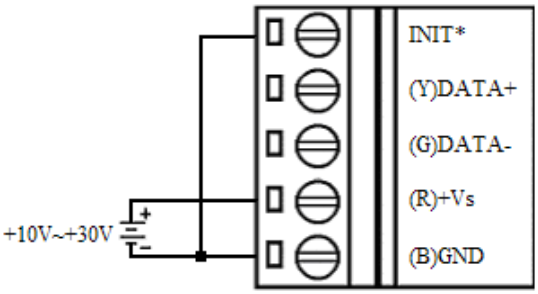
Default Setting

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

Application Wiring

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



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

Analog Output Range Configuration Code Table

Signal Type	Range	Code
mA	0~20mA	0B
	4~20mA	0C

Analog Output Rate Configuration Code Table

Output rate (20mA/S)	Code (16 hex)
Immediate	00
0.125	01
0.25	02
0.5	03
1	04
2	05
4	06
8	07
16	08
32	09
64	0A
128	0B
256	0C
512	0D
1024	0E
2048	0F

Pin Definition

Pin	Name	Function
1~5		NC
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	Iout0+	0-ch analog output +
12	Iout0-	0-ch analog output -
13	Iout1+	1-ch analog output +
14	Iout1-	1-ch analog output -
15	Iout2+	2-ch analog output +
16	Iout2-	2-ch analog output -
17	Iout3+	3-ch analog output +
18	Iout3-	3-ch analog output -
19	EXTPWR	External power +
20	OUTCOM	External power -