

SmartGen

MAKING CONTROL SMARTER

DOUT16B

DIGITAL OUTPUT MODULE

USER MANUAL



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Table 1 Software Version

Date	Version	Note
2015-11-10	1.0	Original Release.
2022-01-14	1.1	Modify supply voltage.
2025-03-22	1.2	Add the description of output port voltage.

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1 OVERVIEW

DOUT16B Digital Output Module is an expansion module which has 16 ways. Each way output can realize programmable function. Processed DOUT16B data is transmitted to DOUT16B output module by HMC9000/HMC6000 for processing via CANBUS.

2 TECHNICAL PARAMETERS

Table 2 Technical Parameters

Parameter	Contents
Working Voltage	DC18.0V~ DC35.0V continuous power supply
Power Consumption	<5W
Programmable Relay Output 1-16	7A Connected to common output port.
Case Dimension	161.6mm x 89.7mm x 60.7mm
Working Temperature	(-25~+70)°C
Working Humidity	(20~93)%RH
Storage Temperature	(-30~+80)°C
Weight	0.60kg

3 PARAMETERS CONFIGURATION

The parameters of DOUT16B module can be set via HMC9000/HMC6000. The parameters which have been configured are all stored in the internal storage of HMC9000/HMC6000.

Table 3 Parameter Configuration List

Parameter	Range	Default Value	Remarks
1. Output 1 Set	The output function is decided by main controller connected with DOUT16B. The parameters of DOUT16B are all stored in main controller and it will not make influence to parameter settings when changing modules.	0: Not used	Configurable output port function
2. Output 1 Type		0: Normally open	Configurable output type.
3. Output 2 Set		0: Not used	Configurable output port function
4. Output 2 Type		0: Normally open	Configurable output type.
5. Output 3 Set		0: Not used	Configurable output port function
6. Output 3 Type		0: Normally open	Configurable output type.
7. Output 4 Set		0: Not used	Configurable output port function
8. Output 4 Type		0: Normally open	Configurable output type.
9. Output 5 Set		0: Not used	Configurable output port function
10. Output 5 Type		0: Normally open	Configurable output type.
11. Output 6 Set		0: Not used	Configurable output port function
12. Output 6 Type		0: Normally open	Configurable output type.
13. Output 7 Set		0: Not used	Configurable output port function
14. Output 7 Type		0: Normally open	Configurable output type.
15. Output 8 Set		0: Not used	Configurable output port function
16. Output 8 Type		0: Normally open	Configurable output type.
17. Output 9 Set		0: Not used	Configurable output port function
18. Output 9 Type		0: Normally open	Configurable output type.
19. Output 10 Set		0: Not used	Configurable output port function
20. Output 10 Type		0: Normally open	Configurable output type.
21. Output 11 Set		0: Not used	Configurable output port function
22. Output 11 Type		0: Normally open	Configurable output type.
23. Output 12 Set		0: Not used	Configurable output port function
24. Output 12 Type		0: Normally open	Configurable output type.
25. Output 13 Set		0: Not used	Configurable output port function
26. Output 13 Type		0: Normally open	Configurable output type.
27. Output 14 Set		0: Not used	Configurable output port function
28. Output 14 Type		0: Normally open	Configurable output type.
29. Output 15 Set		0: Not used	Configurable output port function
30. Output 15 Type		0: Normally open	Configurable output type.
31. Output 16 Set		0: Not used	Configurable output port function
32. Output 16 Type		0: Normally open	Configurable output type.

4 TERMINALS



Fig.1 DOUT16B Panel

Table 4 Description of Terminal Connection

No.	Function	Cable Size	Description
1.	DC input B-	2.5mm ²	DC power supply negative input.
2.	DC input B+	2.5mm ²	DC power supply positive input.
3.	CAN(H) (CANBUS)	0.5 mm ²	Connect CANBUS communication port to expansion CAN port of HMC9000. Impedance-120Ω shielding wire with its one end grounded is recommended.
4.	CAN(L) (CANBUS)		
5.	AUX OUTPUT1	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
6.			
7.	AUX OUTPUT2	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
8.			
9.	AUX OUTPUT3	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
10.			
11.	AUX OUTPUT4	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
12.			
13.	AUX OUTPUT5	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
14.			
15.	AUX OUTPUT6	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
16.			
17.	AUX OUTPUT7	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
18.			
19.	AUX OUTPUT8	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
20.			

No.	Function	Cable Size	Description
21.			is 7A.
22.			
23.	AUX OUTPUT7	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
24.			
25.			
26.	AUX OUTPUT8	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
27.			
28.			
29.	AUX OUTPUT9	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
30.			
31.			
32.	AUX OUTPUT10	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
33.			
34.			
35.	AUX OUTPUT11	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
36.			
37.			
38.	AUX OUTPUT12	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
39.			
40.			
41.	AUX OUTPUT13	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
42.			
43.			
44.	AUX OUTPUT14	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
45.			
46.			
47.	AUX OUTPUT15	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
48.			
49.			
50.	AUX OUTPUT16	1.0mm ²	Voltage free output; DC voltage is 30V, rated current is 7A.
51.			
52.			
POWER	Power indicator		Light when power supply is normal, distinguish when abnormal.
LINK	Upgrade port		Software upgrades connection port.
SWITCH	Function selection switch		Address selection: It is address 1 (module 1) when the switch 1 is connected to terminal 12 while address 2 (module 2) connecting to ON terminal. Baud rate selection: It is 250kbps when the switch 2 is connected to terminal 12 while 125kbps connecting to ON terminal.

5 INSTALLATION

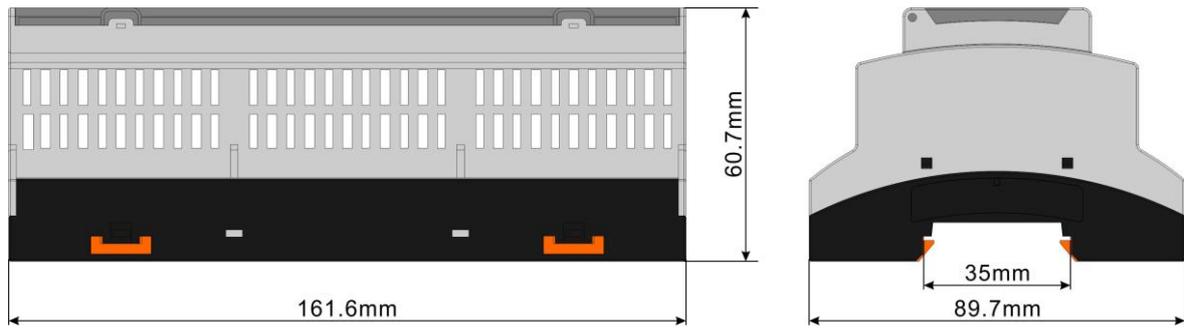


Fig.2 Case Dimension

6 TROUBLESHOOTING

Table 5 Troubleshooting

Problem	Possible Solution
Controller no response with power.	Check controller connection wirings.
CANBUS communication failure	Check wiring.
No output from output port	Check if output port settings are active.