



SmartGen
ideas for power

DOUT16B

DIGITAL OUTPUT MODULE

USER MANUAL



SMARTGEN (ZHENGZHOU) TECHNOLOGY CO., LTD.



Chinese trademark

SmartGen English trademark

SmartGen — make your generator *smart*

SmartGen Technology Co., Ltd.

No.28 Jinsuo Road

Zhengzhou

P. R. China

Tel: 0086-371-67988888/67981888

0086-371-67991553/67992951

0086-371-67981000(overseas)

Fax: 0086-371-67992952

Web: <http://www.smartgen.com.cn>

<http://www.smartgen.cn>

Email: sales@smartgen.cn

All rights reserved. No part of this publication may be reproduced in any material form (including photocopying or storing in any medium by electronic means or other) without the written permission of the copyright holder.

Applications for the copyright holder's written permission to reproduce any part of this publication should be addressed to Smartgen Technology at the address above.

Any reference to trademarked product names used within this publication is owned by their respective companies.

Smartgen Technology reserves the right to change the contents of this document without prior notice.

Software Version

Date	Version	Note
2015-11-10	1.0	Original Release



CONTENTS

1 OVERVIEW	4
2 TECHNICAL PARAMETERS	4
3 PARAMETERS CONFIGURATION.....	5
4 TERMINAL.....	6
5 INSTALLATION.....	8
6 TROUBLESHOOTING	8

SmartGen



1 OVERVIEW

DOUT16B Digital Output Module is an expansion module which has 16 auxiliary digital output channels. DOUT16B data is transmitted to DOUT16B output module by HMC9000/HMC6000 for processing via CANBUS.

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 conditions	Temperature: (-25~+70)°C Humidity: (20~93)%RH
Storage conditions	Temperature: (-25~+70)°C
Weight	0.60kg

SmartGen



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.

Parameter configuration list

Parameter	Range	default value	Remarks
1. Output 1 Set	The output function is decided by main control controller connected with DOUT16B. The parameters of DOUT16B are all stored in main control controller and it'll make no 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 TERMINAL

Panel drawing of DOUT16B:



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. output port 1	1.0mm ²	Voltage free output; rated current is 7A.
6.			
7.			
8.	Aux. output port 2	1.0mm ²	Voltage free output; rated current is 7A.
9.			
10.			
11.	Aux. output port 3	1.0mm ²	Voltage free output; rated current is 7A.
12.			
13.			
14.	Aux. output port 4	1.0mm ²	Voltage free output; rated current is 7A.
15.			
16.			
17.	Aux. output port 5	1.0mm ²	Voltage free output; rated current is 7A.
18.			
19.			
20.	Aux. output port 6	1.0mm ²	Voltage free output; rated current is 7A.
21.			

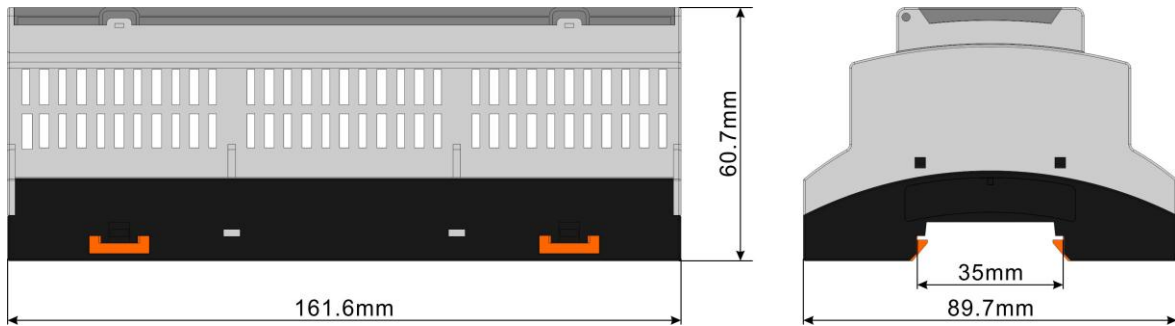


No.	Function	Cable Size	Description
22.			
23.			
24.	Aux. output port 7	1.0mm ²	Voltage free output; rated current is 7A.
25.			
26.			
27.	Aux. output port 8	1.0mm ²	Voltage free output; rated current is 7A.
28.			
29.			
30.	Aux. output port 9	1.0mm ²	Voltage free output; rated current is 7A.
31.			
32.			
33.	Aux. output port 10	1.0mm ²	Voltage free output; rated current is 7A.
34.			
35.			
36.	Aux. output port 11	1.0mm ²	Voltage free output; rated current is 7A.
37.			
38.			
39.	Aux. output port 12	1.0mm ²	Voltage free output; rated current is 7A.
40.			
41.			
42.	Aux. output port 13	1.0mm ²	Voltage free output; rated current is 7A.
43.			
44.			
45.	Aux. output port 14	1.0mm ²	Voltage free output; rated current is 7A.
46.			
47.			
48.	Aux. output port 15	1.0mm ²	Voltage free output; rated current is 7A.
49.			
50.			
51.	Aux. output port 16	1.0mm ²	Voltage free output; rated current is 7A.
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 module 1 when the switch 1 is connected to terminal 12 while 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

Case dimensions:



6 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.

SmartGen