

16-channel DO Module

The 16 Channel Digital Output (DO) module will provide the FB3000 Controller the ability to Drive up to 16 channels of digital output devices. The module will be able to Drive Inductive Loads, Solenoids, Light bulbs, and any other Digital Output devices.

Providing robust activation of a variety of load types in a single module reduces configuration time and maintenance costs.

The 16 channel Logic module (3DOH16) provides a total of 16 individually field-configurable Digital Outputs (DO).

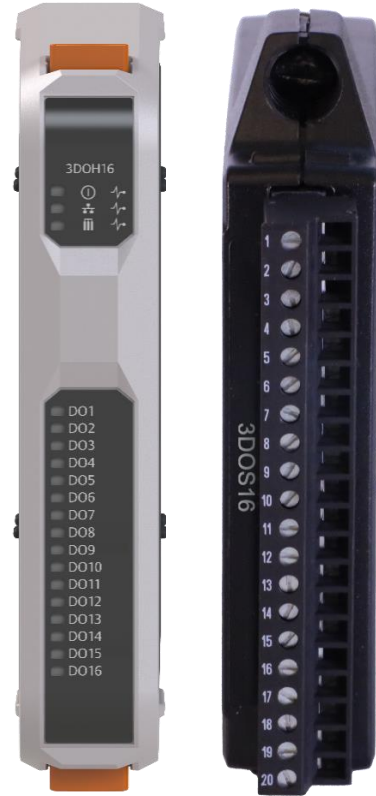
The Personality module (3DOS16) provides both built-in surge protection and a wiring connection for the DO module.

Outputs

These 16 channels are grouped into 4 channels of 4 pins. The voltage to output channels is to be provided externally to the module. Each DO channel can individually sink up to 500mA. This device will be used with universal Logic module.

Local Terminations

The Personality module enables you to connect field or panel wiring to the DO module through a 16-point terminal block assembly that also provides surge suppression up to 2kV. Terminations are pluggable and accept a maximum wire size of 16 AWG (American Wire Gauge). See the following table for the wiring guide.

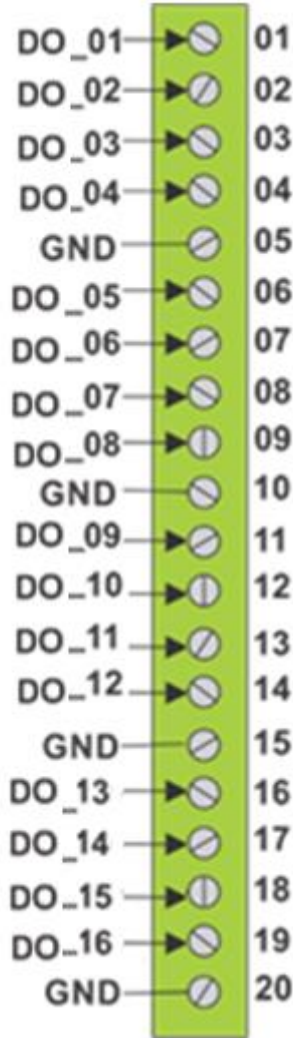


16 DO Logic Module (3DOH16, left) and Personality Module (3DOS16, right)

①	Module Status LED
⚡	Communication Status LED
⏏	Termination Board Status LED

FB3000 16-channel DO Module

Field Wiring Terminals on Personality Module (3DOS16)



Block	Definition
01	Digital Output 01
02	Digital Output 02
03	Digital Output 03
04	Digital Output 04
05	DO_1-4 GND
06	Digital Output 05
07	Digital Output 06
08	Digital Output 07
09	Digital Output 08
10	DO_5-8 GND
11	Digital Output 09
12	Digital Output 10
13	Digital Output 11
14	Digital Output 12
15	DO_9-12 GND
16	Digital Output 13
17	Digital Output 14
18	Digital Output 15
19	Digital Output 16
20	DO_13-16 GND

Outputs

Digital Outputs	Quantity	Up to 16 individually configurable DO channels
	Type	Open Drain externally powered Solid state relay type
	Output Voltage	External power supply: 10.5V to 30 Vdc
	Surge Suppression	31 Vdc transorb between signal and isolated ground

Power		
Personality Module	Discreet Output (per channel)	0.09 W
Logic Module	Total	3.5W
Physical		
I/O	Dimensions	139.9 mm W x 109.5 mm H x 22.4 mm D (5.506 in W x 4.312 in H x .88 in D)
	Weight	0.18 Kg (0.4 lbs)
LEDs	15 status indicators: Status, Communication, and Termination indicators (1 through 3); DI/PI (4 through 19)	
Personality Module	Dimensions	112.7 mm W x 98.4 mm H x 19.8 mm D (4.438 In W x 3.875 in H x 0.781 in D)
	Surge suppression	20-point terminal block assemblies up to 2 kV
	Wiring	Up to size 16 AWG at the pluggable terminal blocks
Environment		
Same as the FB3000 in which it is installed.		
Approvals		
Same as the FB3000 in which it is installed.		

For customer service and technical support,
visit [Emerson.com/Guardian](https://emerson.com/Guardian).

North America and Latin America:

Emerson Energy and Transportation
Solutions
6005 Rogerdale Road
Houston, TX 77072 U.S.A.
T +1 281 879 2699 | F +1 281 988 4445
[Emerson.com/SCADAforEnergy](https://emerson.com/SCADAforEnergy)

United Kingdom:

Emerson Process Management Limited
Fosse House, 6 Smith Way
Grove Park, Enderby
Leicester LE19 1SX UK
T +44 0 870 240 1978

Europe:

Emerson S.R.L.
Regulatory Compliance Shared Services
Department
Company No. J12/88/2006
Emerson 4 Street
Parcul Industrial Tetarom 11
Romania
T +40 374 132 000

Middle East/Africa:

Emerson Energy and Transportation
Solutions
Emerson FZE
P.O. Box 17033
Jebel Ali Free Zone – South 2
Dubai U.A.E.
T +971 4 8118100 | F +971 4 8865465

Asia-Pacific:

Emerson Energy and Transportation
Solutions
1 Pandan Crescent
Singapore 128461
T +65 6777 8211 | F +65 6777 0947

© 2024 Bristol Inc. All rights reserved.

This publication is for informational purposes only. While every effort has been made to ensure accuracy, this publication shall not be read to include any warranty or guarantee, express or implied, including as regards the products or services described or their use or applicability. Bristol Inc. (hereinafter “Energy and Transportation Solutions” or ETS) reserves the right to modify or improve the designs or specifications of its products at any time without notice. All sales are governed by ETS terms and conditions which are available upon request. ETS accepts no responsibility for proper selection, use or maintenance of any product, which remains solely with the purchaser and/or end-user. Emerson and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners.