

DC Digital Output Modules

Cat. No.	Inputs/Outputs	Voltage Category	Operating Voltage Range	Removable Terminal Block
1756-OB8	8 outputs	12/24V DC source	10...30V DC	1756-TBNH 1756-TBSH
1756-OB8EI	8 electronically fused, individually isolated outputs	12/24V DC source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB8I	8 individually isolated outputs	12/24V DC source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB16D	16 diagnostic outputs (8 points/group)	24V DC source	19.2...30V DC	1756-TBCH 1756-TBS6H
1756-OB16E	16 electronically fused outputs (8 points/group)	12/24V DC source	10...31.2V DC	1756-TBNH 1756-TBSH
1756-OB16I	16 individually isolated outputs	12/24V DC sink/source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB16IEF	16 high-speed, individually isolated, electronically-fused outputs	24V DC sink/source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB16IEFS	16 scheduled, high-speed, individually isolated, electronically-fused outputs	24V DC sink/source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB16IS	16 individually isolated outputs 8 scheduled outputs	12/24V DC sink/source	10...30V DC	1756-TBCH 1756-TBS6H
1756-OB32	32 outputs (16 points/group)	12/24V DC source	10...31.2V DC	1756-TBCH 1756-TBS6H
1756-OC8	8 outputs (4 points/group)	48V DC source	30...60V DC	1756-TBNH 1756-TBSH
1756-OG16	16 (8 points/group)	5V DC TTL source (Low=True)	4.5...5.5V DC	1756-TBNH 1756-TBSH
1756-OH8I	8 individually isolated outputs	120V DC	90...146V DC	1756-TBCH 1756-TBS6H
1756-OV16E	16 electronically fused outputs (8 points/group)	12/24V DC sink	10...30V DC	1756-TBNH 1756-TBSH
1756-OV32E	32 electronically fused outputs (16 points/group)	12/24V DC sink	10...30V DC	1756-TBCH 1756-TBS6H

Contact Output Modules

Cat. No.	Inputs/Outputs	Operating Voltage Range	Removable Terminal Block
1756-OW16I	16 normally open, individually isolated outputs	5...125V DC 10...240V AC	1756-TBCH 1756-TBS6H
1756-OX8I	8 normally open 8 normally closed, individually isolated outputs (2 points/group)	5...125V DC 10...240V AC	1756-TBCH 1756-TBS6H

Allen-Bradley 1756-OB16IEF

Select a ControlLogix System



Step 1
[ControlLogix I/O Modules](#)

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- Select:
- I/O modules—Some modules have field-side diagnostics, electronic fusing, or individually isolated inputs/outputs
 - A remote terminal block (RTB) or wiring system for each I/O module



Step 2
[ControlLogix Integrated Motion](#)

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- Select:
- An EtherNet/IP communication module for Integrated Motion
 - Associated cables
 - Select drives, motors, and accessories (use the Motion Analyzer software)



Step 3
[ControlLogix Communication Modules](#)

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- Select:
- Networks
 - Communication modules
 - Associated cables and network equipment
 - Sufficient modules and cables if you are planning a redundant system



Step 4
[ControlLogix Controllers](#)

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- Select a controller:
- Standard ControlLogix controller
 - Redundant ControlLogix controller
 - Safety GuardLogix controller
 - Extreme environment ControlLogix controller
 - Standard Armor ControlLogix controller
 - Safety Armor GuardLogix controller

Step 5
[ControlLogix Chassis](#)

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- Select:
- A chassis with sufficient slots
 - Slot fillers for empty slots

Step 6
[ControlLogix Power Supplies](#)

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- Select:
- One power supply for each chassis, if you are using standard power supplies
 - A power supply bundle if you are planning a redundant power supply system

ControlLogix I/O Modules

The ControlLogix architecture provides a wide range of input and output modules to span many applications, from high-speed digital to process control. The ControlLogix architecture uses a Producer/Consumer model so that input information and output status can be shared among multiple controllers.

Each ControlLogix I/O module mounts in a ControlLogix chassis and **requires** a removable terminal block (RTB) or a 1492 interface module (IFM) to connect all field-side wiring. RTBs and IFMs are not included with the I/O modules. They must be ordered separately.

For detailed specifications, see 1756 ControlLogix I/O Modules Specifications Technical Data, publication [1756-TD002](#).

AC Digital Input Modules

Cat. No.	Inputs/Outputs	Voltage Category	Operating Voltage Range	Removable Terminal Block
1756-IA8D	8 diagnostic inputs (4 points/group)	120V AC	79...132V AC	1756-TBNH 1756-TBSH
1756-IA16	16 inputs (8 points/group)	120V AC	74...132V AC	1756-TBNH 1756-TBSH
1756-IA16I	16 individually isolated inputs	120V AC	74...132V AC	1756-TBCH 1756-TBS6H
1756-IA32	32 inputs (16 points/group)	120V AC	74...132V AC	1756-TBCH 1756-TBS6H
1756-IM16I	16 individually isolated inputs	240V AC	159...265V AC	1756-TBCH 1756-TBS6H
1756-IN16	16 inputs (8 points/group)	24V AC	10...30V AC	1756-TBNH 1756-TBSH

AC Digital Output Modules

Cat. No.	Inputs/Outputs	Voltage Category	Operating Voltage Range	Removable Terminal Block
1756-OA8	8 outputs (4 points/group)	120/240V AC	79...265V AC	1756-TBNH 1756-TBSH
1756-OA8D	8 diagnostic, electronically fused outputs (4 points/group)	120V AC	74...132V AC	1756-TBNH 1756-TBSH
1756-OA8E	8 electronically fused outputs (4 points/group)	120V AC	74...132V AC	1756-TBNH 1756-TBSH
1756-OA16	16 mechanically fused/group outputs (8 points/group)	120/240V AC	74...265V AC	1756-TBNH 1756-TBSH
1756-OA16I	16 individually isolated outputs	120/240V AC	74...265V AC	1756-TBCH 1756-TBS6H
1756-ON8	8 outputs (4 points/group)	24V AC	10...30V AC, current > 50 mA 16...30V AC, current < 50 mA	1756-TBNH 1756-TBSH

Allen-Bradley 1756-OB16IEF

Accessories—I/O Modules

1756 Removable Terminal Blocks

Removable terminal blocks (RTBs) provide a flexible interconnection between your plant wiring and 1756 I/O modules. The RTB plugs into the front of the I/O module. The type of module determines the RTB you need. You can choose screw-clamp or spring-clamp RTBs.



RTBs are not shipped with I/O modules. You must order them separately. The standard housing on the front of the wiring arm is not necessarily deep enough for 2.5 mm² (14 AWG) wiring. If you plan to use 2.5 mm² (14 AWG) wiring, also order the extended housing. For more information on Extended-Depth Housing, see Rockwell Automation Knowledgebase article #41488, Use of the 1756-TBE Extended Terminal Housing. You can access the article at: <https://rockwellautomation.custhelp.com/> (login is required).

Attribute	1756-TBNH	1756-TBSH	1756-TBCH	1756-TBS6H	1756-TBE
Description	20-position NEMA screw-clamp removable block	20-pin spring-clamp removable terminal block with standard housing	36-pin cage-clamp removable terminal block with standard housing	36-pin spring-clamp removable terminal block with standard housing	Extended-depth terminal block housing
Screw torque	0.8...1 N•m 7...9 lb•in		0.4 N•m 4.4 lb•in		—

Wiring Systems

As an alternative to buying RTBs and connecting the wires yourself, you can buy a wiring system of the following:

- Interface modules (IFMs) that provide the I/O terminal blocks for Digital I/O modules. Use the prewired cables that match the I/O module to the IFM.
- Analog interface modules (AIFMs) that provide the I/O terminal blocks for analog I/O modules. Use the prewired cables that match the I/O module to the AIFM.
- I/O module-ready cables. One end of the cable assembly is an RTB that plugs into the front of the I/O module. The other end has individually color-coded conductors that connect to a standard terminal block.

