

What Are ControlLogix Digital I/O Modules?

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ControlLogix® digital I/O modules are input and output modules that provide On/Off detection and actuation. By using the producer/consumer network model, digital I/O modules can produce information when needed while providing additional system functions.

Available Features

This table lists several features available on ControlLogix digital I/O modules.

Feature	Description
Removal and Insertion Under Power (RIUP)	You can remove and insert modules and removable terminal blocks (RTB) while power is applied.
Producer/consumer communication	This communication method is an intelligent data exchange between modules and other system devices in which each module produces data without first being polled.
System time stamp of data	A 64-bit system clock places a time stamp on the transfer of data between the module and its owner-controller.
Module-level fault reporting and field-side diagnostic detection	Fault and diagnostic detection capabilities to help you effectively and efficiently use your module and troubleshoot your application.
Agency Certification	Class 1, Division 2 agency certification for any application that requires approval.

I/O Modules in the ControlLogix System

ControlLogix modules mount in a ControlLogix chassis and require either a removable terminal block (RTB) or a Bulletin 1492 wiring interface module (IFM)⁽¹⁾ to connect all field-side wiring.

Before you install and use your module, you must do the following:

- Install and ground a 1756 chassis and power supply. To install these products, refer to the publications listed in [Additional Resources on page 10](#).
- Order and receive an RTB or IFM and its components for your application.

IMPORTANT RTBs and IFMs are not included with your module purchase. See [page 112](#) for RTBs and [page 237](#) for IFMs.

Table 1 - ControlLogix Digital I/O Modules

Cat. No.	Description	Page
1756-IA8D	79... 132V AC 8-point diagnostic input module	135
1756-IA16	74... 132V AC 16-point input module	135
1756-IA16I	79... 132V AC 16-point isolated input module	136
1756-IA32	74... 132V AC 32-point input module	137
1756-IB16	10... 31.2V DC 16-point input module	138
1756-IB16D	10... 30V DC diagnostic input module	139
1756-IB16I	10... 30V DC 16-point, isolated input module	140
1756-IB16IF	10... 30V DC, 16-point, isolated, fast peer control input module	141
1756-IB32	10... 31.2V DC 32-point input module	142
1756-IC16	30... 60V DC 16-point input module	143
1756-IG16	Transistor-transistor logic (TTL) input module	144
1756-IH16I	90... 146V DC 16-point isolated input module	145
1756-IM16I	159... 265V AC 16-point isolated input module	146
1756-IN16	10... 30V AC 16-point input module	146
1756-IV16	10... 30V DC 16-point sourcing current input module	147
1756-IV32	10... 30V DC 32-point sourcing current input module	148
1756-OA8	74... 265V AC 8-point output module	149
1756-OA8D	74... 132V AC 8-point diagnostic output module	150
1756-OA8E	74... 132V AC 8-point electronically-fused output module	151
1756-OA16	74... 265V AC 16-point output module	152
1756-OA16I	74... 265V AC 16-point isolated output module	153
1756-OB8	10... 30V DC 8-point output module	154
1756-OB8EI	10... 30V DC 8-point electronically-fused, isolated output module	155
1756-OB8I	10... 30V DC 8-point isolated output module	156
1756-OB16D	19.2... 30V DC 16-point diagnostic output module	157

(1) The ControlLogix system has been agency certified using only the ControlLogix RTB catalog numbers 1756-TBCH, 1756-TBNH, 1756-TBSH, and 1756-TBS6H. Any application that requires agency certification of the ControlLogix system using other wiring termination methods may require application-specific approval by the certifying agency.

Table 1 - ControlLogix Digital I/O Modules (continued)

Cat. No.	Description	Page
1756-OB16E	10...31.2V DC 16-point electronically-fused output module	158
1756-OB16I	10...30V DC 16-point isolated output module	161
1756-OB16IEF	10...30V DC, 16-point, isolated, fast peer control output module	162
1756-OB16IEFS	10...30V DC, 16-point, isolated, fast, scheduled per point output module	163
1756-OB16IS	10...30V DC scheduled, isolated output module	164
1756-OB32	10...31.2V DC 32-point output module	165
1756-OC8	30...60V DC 8-point output module	166
1756-OG16	Transistor-transistor logic (TTL) output module	167
1756-OH81	90...146V DC 8-point isolated output module	168
1756-ON8	10...30V AC 8-point output module	169
1756-OV16E	10...30V DC 16-point electronically-fused, sinking current output module	170
1756-OV32E	10...30V DC 32-point electronically-fused, sinking current output module	171
1756-OW16I	10...265V, 5-150V DC 16-point isolated contact module	172
1756-OX8I	10...265V, 5-150V DC 8-point isolated contact module	173