

ControlLogix I/O Modules Specifications

Bulletin 1756

| Topic | Page |
|------------------------------|------|
| Summary of Changes | 1 |
| I/O Module Overview | 3 |
| AC Digital I/O Modules | 7 |
| DC Digital I/O Modules | 45 |
| Safety I/O Modules | 147 |
| Contact I/O Modules | 163 |
| Analog I/O Modules | 169 |
| HART I/O Modules | 217 |
| Compute Modules | 241 |
| Specialty I/O Modules | 245 |
| ControlLogix I/O Accessories | 269 |

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 Producer/Consumer technology, which allows input information and output status to be shared among multiple ControlLogix controllers.

Summary of Changes

This publication contains new and updated information as indicated in the following table.

| Topic | Page |
|--|------|
| Corrected 1756-0F8H, 1756-0F8HK Technical Specifications | 233 |
| Corrected RTB Specifications | 270 |

Rockwell Automation recognizes that some of the terms that are currently used in our industry and in this publication are not in alignment with the movement toward inclusive language in technology. We are proactively collaborating with industry peers to find alternatives to such terms and making changes to our products and content. Please excuse the use of such terms in our content while we implement these changes.

Bulletin 1756 ControlLogix chassis-based modules provide a full range of digital, diagnostic digital, analog, motion control, specialty I/O, and compute modules to meet your application needs. You can use any of the chassis-based modules in the local chassis of a ControlLogix controller or in a chassis linked to a ControlLogix controller across ControlNet® or EtherNet/IP™ networks.

Catalog Number Explanation

Certain I/O module catalog numbers contain characters at the **end** of the catalog number that indicate additional features.

| Character | I/O Type | Description |
|-----------|-----------------------|--|
| D | Diagnostic | These modules provide diagnostic features to the point level. |
| E | Electronic fusing | These modules have internal electronic fusing to help prevent too much current from flowing through the module. |
| I | Individually isolated | These modules have individually isolated inputs or outputs. |
| K | Conformal coated | These modules have additional conformal coating and design considerations that add a degree of protection when exposed to harsh, corrosive environments. |
| XT | Conformal coated | These modules have additional conformal coating and design considerations that add a greater degree of protection when exposed to harsh, corrosive environments. |
| H | HART interface | These modules send and receive digital information across analog wires between smart devices and control or monitoring systems data using HART (Highway Addressable Remote Transducer) protocol. |
| S | Scheduled or Safety | These modules offer time-scheduled output control or ensure that ControlLogix control systems operate safely. |
| SOE | Sequence of Events | These modules offer sub-millisecond time-stamping on a per point basis. |

IMPORTANT

When a ControlLogix product that is rated for harsh environments (corrosive atmosphere, extended temperature, etc.) is used in a system with other ControlLogix products that have lower specification values, the system is derated to the lowest common value.

EXAMPLE: If the maximum operating temperature specification found in the Technical Data for your ControlLogix-XT module is 70 °C (158 °F) and you pair it with a ControlLogix chassis that is temperature rated to 60 °C (140 °F), your system is derated to 60 °C (140 °F).

To ensure that your system is equipped for harsh environments, compare the corrosive atmosphere, temperature, and other specifications found in the Technical Data publication for each product.

Available 1756 I/O Modules

| Module Type | Input Module Catalog Number | Page | Output Module Catalog Number | Page | |
|------------------------|--|------|------------------------------------|-------------------------|-----|
| AC Digital I/O Modules | 1756-IA8D, 1756-IA8DK | 7 | 1756-OA8, 1756-OA8K | 26 | |
| | 1756-IA16, 1756-IA16K | 10 | 1756-OA8D | 29 | |
| | 1756-IA16I, 1756-IA16IK | 13 | 1756-OA8E | 32 | |
| | 1756-IA32, 1756-IA32K | 16 | 1756-OA16, 1756-OA16K | 35 | |
| | 1756-IM16I, 1756-IM16IK | 19 | 1756-OA16I, 1756-OA16IK | 38 | |
| | 1756-IN16, 1756-IN16K | 22 | 1756-ON8, 1756-ON8K | 41 | |
| DC Digital I/O Modules | 1756-IB16, 1756-IB16K, 1756-IB16XT | 45 | 1756-OB8, 1756-OB8K | 90 | |
| | 1756-IB16D, 1756-IB16DK | 49 | 1756-OB8E1, 1756-OB8E1K | 94 | |
| | 1756-IB16I, 1756-IB16IK | 53 | 1756-OB16D, 1756-OB16DK | 98 | |
| | 1756-IB16IF, 1756-IB16IFK | 57 | 1756-OB16E, 1756-OB16EK | 102 | |
| | 1756-IB16ISOE, 1756-IB16ISOEK | 61 | 1756-OB16I, 1756-OB16IK | 107 | |
| | 1756-IB32, 1756-IB32K, 1756-IB32XT | 65 | 1756-OB16IEF, 1756-OB16IEFK | 111 | |
| | 1756-IC16 | 68 | 1756-OB16IEFS, 1756-OB16IEFSK | 115 | |
| | 1756-IG16, 1756-IG16K | 72 | 1756-OB16IS | 119 | |
| | 1756-IH16I, 1756-IH16IK | 76 | 1756-OB32, 1756-OB32K, 1756-OB32XT | 123 | |
| | 1756-IH16ISOE, 1756-IH16ISOEK | 79 | 1756-OC8, 1756-OC8K | 127 | |
| | 1756-IV16, 1756-IV16K | 82 | 1756-OG16, 1756-OG16K | 131 | |
| | 1756-IV32, 1756-IV32K | 86 | 1756-OH8I | 135 | |
| | | | | 1756-OV16E | 138 |
| | | | | 1756-OV32E, 1756-OV32EK | 142 |
| Safety I/O Modules | 1756-IB16S | 147 | 1756-OBV8S | 154 | |
| Contact I/O Modules | | | 1756-OX8I, 1756-OX8IK | 163 | |
| | | | 1756-OW16I, 1756-OW16IK | 166 | |
| Analog I/O Modules | 1756-IF4FXOF2F, 1756-IF4FXOF2FK | 169 | 1756-OF4, 1756-OF4K | 204 | |
| | 1756-IF8, 1756-IF8K | 174 | 1756-OF8, 1756-OF8K | 208 | |
| | 1756-IF8I, 1756-IF8IK | 179 | 1756-OF8I, 1756-OF8IK | 212 | |
| | 1756-IF16, 1756-IF16K | 184 | | | |
| | 1756-IRT8I, 1756-IRT8IK | 189 | | | |
| | 1756-IR12, 1756-IR12K | 195 | | | |
| | 1756-IT16, 1756-IT16K | 199 | | | |
| HART I/O Modules | 1756-IF8H, 1756-IF8HK | 217 | 1756-OF8H, 1756-OF8HK | 233 | |
| | 1756-IF8IH, 1756-IF8IHK | 221 | 1756-OF8IH, 1756-OF8IHK | 237 | |
| | 1756-IF16H, 1756-IF16HK | 225 | | | |
| | 1756-IF16IH, 1756-IF16IHK | 229 | | | |
| Compute Modules | 1756-CMEE1Y1 | 241 | | | |
| | 1756-CMS1B1, 1756-CMS1C1, 1756-CMS1D1, 1756-CMS1H1 | 243 | | | |
| Specialty I/O Modules | 1756-CFM, 1756-CFMK | 245 | 1756-LSC8XIB8I, 1756-LSC8XIB8IK | 258 | |
| | 1756-HSC, 1756-HSCK | 252 | 1756-PLS | 263 | |