

Compact 5000 I/O Modules and EtherNet/IP Adapters

Catalog Numbers

Digital I/O Modules	5069-IA16, 5069-IB16, 5069-IB16F, 5069-IB16K, 5069-IB6F-3W, 5069-OA16, 5069-OB8, 5069-OB16, 5069-OB16F, 5069-OB16K, 5069-OW4I, 5069-OW16, 5069-OX4I
Analog I/O Modules	5069-IF8, 5069-IY4, 5069-IY4K, 5069-OF4, 5069-OF4K, 5069-OF8
High-speed Counter Module	5069-HSC2xOB4
Safety I/O Modules	5069-IB8S, 5069-IB8SK, 5069-OBV8S, 5069-OBV8SK
Serial Module	5069-SERIAL
Field Potential Distributor	5069-FPD
Address Reserve Module	5069-ARM
EtherNet/IP Adapters	5069-AENTR, 5069-AENTRK, 5069-AEN2TR

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The Compact 5000™ I/O architecture provides a wide range of input and output modules to span many applications, from high-speed digital to process control. The architecture uses Producer/Consumer technology that allows input information and output status to be shared among multiple Logix 5000™ controllers.

Compact 5000 I/O modules are used as local I/O modules in CompactLogix™ 5380 and Compact GuardLogix® 5380 controller systems. The modules are also used as remote I/O modules with CompactLogix 5380, Compact GuardLogix 5380 controllers, and some other Logix 5000 controllers. You use the Studio 5000 Logix Designer® application to configure the modules.

The I/O modules require a removable terminal block (RTB) to connect field-side wiring. RTBs are not included with the I/O modules. You must order RTBs separately.

Summary of Changes

The publication was revised for the following changes.

Topic	Pages
Changed the 5069-OB16, 5069-OB16F, and 5069-OB16K module specifications to indicate that only the Series B hardware supports Field Power Loss Detection.	30
Changed the 5069-IY4 and 5069-IY4K module wiring diagrams with different devices that are connected to the module.	59, 60, 64, and 65
Changed the 5069-IB8S and 5069-IB8SK module wiring diagrams to show normally closed contacts, instead of normally open contacts, which are connected to the module.	82...84

Power Compact 5000 I/O Modules

There are different types of power that are used with Compact 5000 I/O modules.

Power Type	Description	Related Specifications	
		Name	Description
Module (MOD) Power	System-side power that is used to operate a local or remote system. Power passes across a MOD Power bus. Modules draw current from the bus and pass the remaining current to the next module.	MOD Power	Level of MOD Power current that the module draws from the MOD Power bus
		MOD Power Passthrough max	Maximum level of MOD Power current that the module can pass to the next module.
Sensor/ Actuator (SA) Power	Field-side power that some modules use to power field-side devices. Power passes across an SA Power bus. Some modules draw current from the bus and pass the remaining current to the next module. Other modules do not draw current from the bus but do pass the current to the next module. You use 5069-FPD field potential distributors to establish new SA Power buses in a system. IMPORTANT: Remember the following: <ul style="list-style-type: none"> If the system includes DC type modules and AC type modules, you must use a field potential distributor to install them on separate SA Power buses. You cannot install AC type modules directly next to a Compact GuardLogix 5380 controller. You must first install a field potential distributor. 	SA Power	Level of SA Power current that the module draws from the SA Power bus
		SA Power Passthrough max	Maximum level of SA Power current that the module can pass to the next module.
Local Actuator (LA) Power	Field-side power that some Compact 5000 I/O modules use instead of SA power. Modules that use LA power do not use SA power . They only pass SA power to the next to the next I/O module in the system. You must install modules that use LA Power on an SA Power bus with the same module type. For example, you must install a 5069-OB8 module on an SA Power bus that includes DC type modules.	LA Power	Maximum level of LA Power current that you can apply to the module, by channel, group, or module.

For more information on MOD power, SA power, and LA power, see the user manuals that are listed in [Additional Resources on page 137](#).