



## DC Discrete I/O Modules

Genius DC Discrete I/O blocks interface to a wide range of input devices, including both 2-wire and 3-wire electronic proximity switches. Outputs may be low-power control and indicating devices such as relays, contactors, and lamps. These blocks have identical discrete I/O circuits, each easily configured to be an input or an output. Output circuits can be directly connected to input circuits without the use of other components or inversion of logic states. This flexibility provides maximum design and application efficiency. Each circuit contains built-in protection when used as an output, protecting the driver while allowing short-time surges. It also protects against shorted loads caused by wiring errors.

	IC660BBD020	IC660BBD021	IC660BBD022	IC660BBD023	IC660BBD024
Product Name	Genius Discrete I/O Block, 24/48 VDC Grouped, 16 Point, Source	Genius Discrete I/O Block, 24/48 VDC Grouped, 16 Point, Sink	Genius Discrete I/O Block, 24 VDC Grouped, 16 Point, Source	Genius Discrete I/O Block, 24 VDC Grouped, 16 Point, Sink	Genius Discrete I/O Block, 12/24 VDC Grouped, 32 Point, Source
Lifecycle Status	Mature	Mature	Mature	Mature	Mature
Network Support	Genius Bus	Genius Bus	Genius Bus	Genius Bus	Genius Bus
Input Range	18-56 VDC (24/48 V)	18-56 VDC (24/48 V)	18-30 VDC (24 V)	18-30 VDC (24 V)	18-30 VDC (24 V)
Sink/Source	Source	Sink	Source	Sink	Source
Output Range	18-56 VDC (24/48 V)	18-56 VDC (24/48 V)	18-30 VDC (24 V)	18-30 VDC (24 V)	18-30 VDC (24 V)
Number of Points	16	16	16	16	32
Input and Output Response Time - ON/OFF (msec.)	Input 1.7 msec plus configurable filter: 5 to 100mS for input; Output 1.0 msec	Input 1.7 msec plus configurable filter: 5 to 100mS for input; Output 1.0 msec	Input 1.7 msec plus configurable filter: 5 to 100mS for input; Output 1.0 msec	Input 1.7 msec plus configurable filter: 5 to 100mS for input; Output 1.0 msec	Input 1.4 msec plus configurable filter: 1 to 100mS for input; Output 0.5 msec
Input Impedance	5.6K ohms (24/48V), 1.8K ohms (24V)	5.6K ohms (24/48V), 1.8K ohms (24V)	5.6K ohms (24/48V), 1.8K ohms (24V)	5.6K ohms (24/48V), 1.8K ohms (24V)	3.3 K ohms
Load Current Per Point	2 Amp	2 Amp	2 Amp	2 Amp	0.5 Amp
Points Per Common	One group of 16	One group of 16	One group of 16	One group of 16	One group of 32
Protection	Short circuit level sensor at the switching device	Short circuit level sensor at the switching device	Short circuit level sensor at the switching device	Short circuit level sensor at the switching device	Short circuit level sensor at the switching device
Diagnostics	Input Diagnostics: Open wire, Overtemperature, Failed Switch Output Diagnostics: Short Circuit, Overload, No Load, Failed Switch, Overtemperature, Pulse Test	Input Diagnostics: Open wire, Overtemperature, Failed Switch Output Diagnostics: Short Circuit, Overload, No Load, Failed Switch, Overtemperature, Pulse Test	Input Diagnostics: Open wire, Overtemperature, Failed Switch Output Diagnostics: Short Circuit, Overload, No Load, Failed Switch, Overtemperature, Pulse Test	Input Diagnostics: Open wire, Overtemperature, Failed Switch Output Diagnostics: Short Circuit, Overload, No Load, Failed Switch, Overtemperature, Pulse Test	Output Diagnostics: Short Circuit, Overload, Failed Switch, Pulse Test
Operating Voltage	18-56 VDC (24/48 V)	18-56 VDC (24/48 V)	18-30 VDC (24 V)	18-30 VDC (24 V)	10-30 VDC
Dimensions (H x W x D)	8.83" (22.44cm) x 3.50" (8.89cm) x 3.94" (10.00cm)	8.83" (22.44cm) x 3.50" (8.89cm) x 3.94" (10.00cm)	8.83" (22.44cm) x 3.50" (8.89cm) x 3.94" (10.00cm)	8.83" (22.44cm) x 3.50" (8.89cm) x 3.94" (10.00cm)	8.83" (22.44cm) x 3.50" (8.89cm) x 3.94" (10.00cm)