

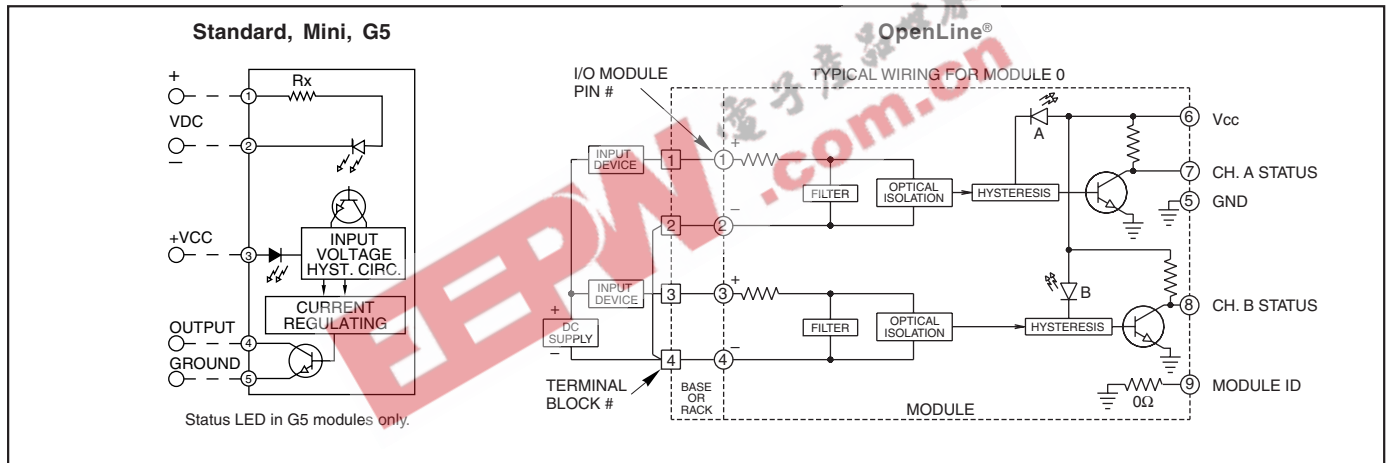
## FEATURES

- Fast Switching Polarized Input Types
- UL, CSA, CE, TÜV Certified (TÜV not available on OpenLine®)
- Optical Isolation
- OpenLine® and G5 Modules have Built-in Status LED



70L-IDC      70G-IDC      70-IDC      70M-IDC

## CIRCUITRY



## SPECIFICATIONS: By Package Style

Package Style		Std (70-)	Mini (70M-)	G5 (70G-)	OL (70L-)
<b>Specifications</b>	<b>Units</b>				
Output Current Range	mA	1-50	1-50	1-50	1-50
Minimum Output Breakdown Voltage	Vdc	50	50	50	50
Isolation Voltage <sup>1</sup>	Vrms	4000	4000	4000	2500
Vibration <sup>2</sup>		MIL-STD-202	MIL-STD-202	MIL-STD-202	IEC68-2-6
Mechanical Shock <sup>3</sup>		MIL-STD-202	MIL-STD-202	MIL-STD-202	IEC68-2-27
Storage Temp. Range	°C	-40 to 125	-40 to 125	-40 to 125	-40 to 100
Operating Temp. Range	°C	-40 to 100	-40 to 100	-40 to 100	-40 to 85
Warranty		Lifetime	Lifetime	Lifetime	Lifetime

<sup>1</sup> Field to logic and channel-to-channel if Grayhill racks are used.

<sup>2</sup> MIL-STD-202, Method 204, 20G, 10-2000 Hz or IEC68-2-6, 0.15 mm/sec<sup>2</sup>, 10-150 Hz.

<sup>3</sup> MIL-STD-202, Method 213, Condition F, 1500G or IEC68-2-27, 11 mS, 15g.

**SPECIFICATIONS: By Part Number**  
**Standard and Miniature Modules**

Type/Function		Grayhill Part Number				
Miniature, Polarized		70M-IDC5			70M-IDC15	70M-IDC24
Standard, Non-Polarized		70-IDC5	70-IDC5B	70-IDC5K	70-IDC15	70-IDC24
Specifications	Units					
Maximum Input Voltage	Vdc	32	32	16	32	32
Input Voltage Range <sup>1</sup>	Vdc	3-32	3-32	2.5-16	3-32	3-32
Input Current @ Maximum Input Voltage	mA	18	18	30	18	18
Maximum Turn-On Time	mSec	0.20	0.050	0.025	0.20	0.20
Maximum Turn-Off Time	mSec	0.40	0.075	0.030	0.40	0.40
Nominal Input Resistance (Rx)	Ω	1.8K	1.8K	500	1.8K	1.8K
Maximum Pick-Up Voltage (Output Low)	Vdc	3	3	2.5	3	3
Minimum Drop-Out Voltage (Output High)	Vdc	1	1	1	1	1
Nominal Logic Voltage (Vcc)	Vdc	5	5	5	15	24
Logic Voltage Range	Vdc	3-6	3-6	3.5-6	8-18	15-30
Max. Logic Supply Current @ Nominal Vcc	mA	10	18	18	10	10

**G5 Modules**

Type/Function		Grayhill Part Number					
G5, Polarized, Status LED		70G-IDC5	70G-IDC5B	70G-IDC5D	70G-IDC5K	70G-IDC15	70G-IDC24
Specifications	Units						
Maximum Input Voltage	Vdc	32	32	28	16	32	32
Input Voltage Range <sup>1</sup>	Vdc	3-32	3-32	2.5-28	2.5-16	3-32	3-32
Input Current @ Maximum Input Voltage	mA	18	18	23	30	18	18
Maximum Turn-On Time	mSec	0.20	0.050	0.050	0.025	0.20	0.20
Maximum Turn-Off Time	mSec	0.40	0.075	0.075	0.030	0.40	0.40
Nominal Input Resistance (Rx)	Ω	1.8K	1.8K	1.2K	500	1.8K	1.8K
Maximum Pick-Up Voltage (Output Low)	Vdc	3	3	2.5	2.5	3	3
Minimum Drop-Out Voltage (Output High)	Vdc	1	1	1	1	1	1
Nominal Logic Voltage (Vcc)	Vdc	5	5	5	5	15	24
Logic Voltage Range	Vdc	4.5-6	4.5-6	4.5-6	4.5-6	10-18	17-30
Max. Logic Supply Current @ Nominal Vcc	mA	10	18	10	18	10	10

**OpenLine® Modules**

Type/Function		Grayhill Part Number	
Dual, Polarized		70L-IDC	70L-IDCB
Specifications	Units		
Maximum Input Voltage	Vdc	32	32
Input Voltage Range <sup>1</sup>	Vdc	0-32	0-32
Input Current @ Max. Input Voltage	mA	18	18
Maximum Turn-on Time	mSec	0.20	0.05
Maximum Turn-off Time	mSec	0.40	0.075
Nominal Input Resistance (Rx)	Ω	1800	900
Maximum Pick-Up Voltage (Output Low)	Vdc	3	3
Minimum Drop-Out Voltage (Output High)	Vdc	0.9	0.9
Nominal Logic Voltage (Vcc)	Vdc	5	5
Logic Voltage Range	Vdc	4.5-28	4.5-28
Max. Logic Supply Current @ Nominal Vcc	mA	6/CH	6/CH
Module ID Resistance to Logic Ground	Ω	0	0

Available from your local Grayhill Distributor.  
 For prices and discounts, contact a local Sales Office, an authorized local Distributor or Grayhill.

<sup>1</sup> For input voltages in the range of 90 to 140 Vdc, use AC input modules 70-IAC5, 70M-IAC5, 70G-IAC5 or 70L-IAC. For input voltages in the range of 180 to 280 Vdc, use AC input modules 70-IAC5A, 70M-IAC5A, 70G-IAC5A or 70L-IACA.