

70L-IDC

70G-IDC

70-IDC

70M-IDC

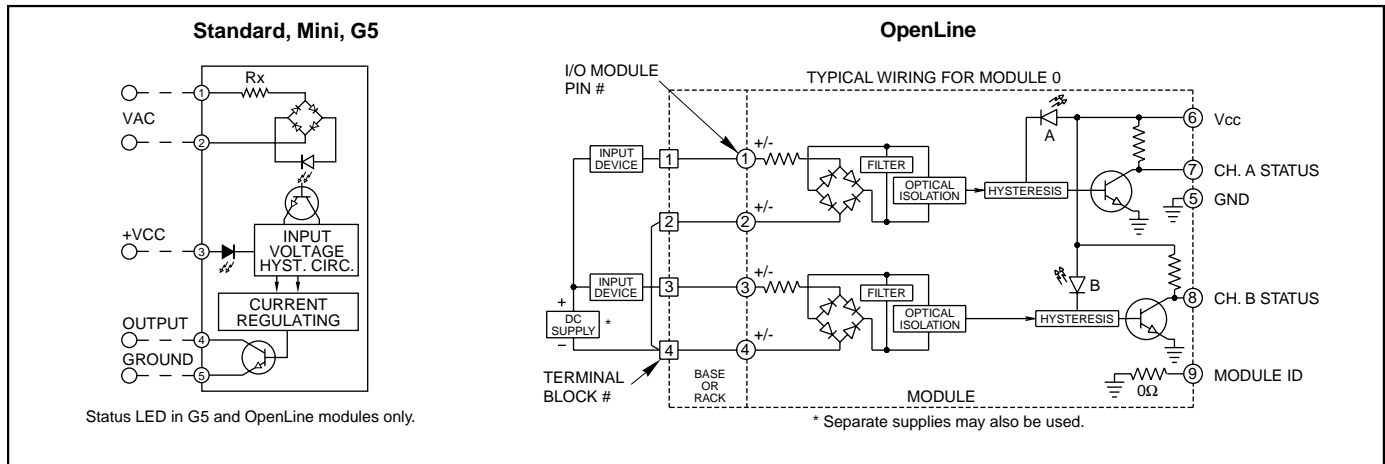
**FEATURES**

- Transient Protection: Meets the requirements of IEEE 472, "Surge Withstanding Capability Test"\*
- Non-Polarized Types Provide Inputs For AC or DC
- UL Recognized, CSA Certified, CE Mark, TÜV (see Engineering Information)
- Optical Isolation
- OpenLine and G5 Modules have Built-in Status LED

**DIMENSIONS**

For complete dimensional drawings, see pages H-4 or H-5.

**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
Min. 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, 20 Gs, 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, 1500 Gs or IEC68-2-27, 11 mS, 15 gs.

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

Type/Function		Grayhill Part Number			
Miniature, Non-Polarized		70M-IDC5G	70M-IDC5NP		
Standard, Non-Polarized		70-IDC5G	70-IDC-5NP	70-IDC15NP	70-IDC24NP
Specifications	Units				
Maximum Input Voltage	Vac/Vdc	60	32	28	32
Input Voltage Range <sup>1</sup>	Vac/Vdc	35-60	15-32/10-32	15-32/10-32	15-32/10-32
Input Current @ Max. Input Voltage	mA	6	25	25	25
Maximum Turn-on Time	mSec	10	5	5	5
Maximum Turn-off Time	mSec	10	5	5	5
Nominal Input Resistance (Rx)	Ω	10K	1.8K	1.8K	1.8K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	35	15/10	15/10	15/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	9	3	3	3
Nominal Logic Voltage (Vcc)	Vdc	5	5	15	24
Logic Voltage Range	Vdc	3-6	3-6	8-18	15-30
Max. Logic Supply Current @ Nominal Vcc	mA	10	10	10	10

**G5 Modules**

Type/Function		Grayhill Part Number			
G5, Non-Polarized, Status LED		70G-IDC5G	70G-IDC5NP	70G-IDC15NP	70G-IDC24NP
Specifications	Units				
Maximum Input Voltage	Vac/Vdc	60	32	28	32
Input Voltage Range <sup>1</sup>	Vac/Vdc	35-60	15-32/10-32	15-32/10-32	15-32/10-32
Input Current @ Max. Input Voltage	mA	6	25	25	25
Maximum Turn-on Time	mSec	10	5	5	5
Maximum Turn-off Time	mSec	10	5	5	5
Nominal Input Resistance (Rx)	Ω	10K	1.8K	1.8K	1.8K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	35	15/10	15/10	15/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	9	3	3	3
Nominal Logic Voltage (Vcc)	Vdc	5	5	15	24
Logic Voltage Range: Std & Mini	Vdc	4.5-6	4.5-6	10-18	17-30
Max. Logic Supply Current @ Nominal Vcc	mA	10	10	10	10

**OpenLine Modules**

Type/Function		Grayhill Part Number	
Dual, Non-Polarized, Status LED		70L-IDCG	70L-IDCNP
Specifications	Units		
Maximum Input Voltage	Vac/Vdc	60	32
Input Voltage Range <sup>1</sup>	Vac/Vdc	35-60	15-32/10-32
Input Current @ Max. Input Voltage	mA	6	25
Maximum Turn-on Time	mSec	10	5
Maximum Turn-off Time	mSec	10	5
Nominal Input Resistance (Rx)	Ω	10.6K	1.9K
Maximum Pick Up Voltage (Output Low)	Vac/Vdc	35	15/10
Minimum Drop Out Voltage (Output High)	Vac/Vdc	9	3
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 Distributors  
 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.