

FEATURES

- Transient Protection: Meets the requirements of IEEE 472, "Surge Withstanding Capability Test"*
- Non-Polarized Types Provide Inputs For AC or DC
- UL, CSA, CE, TÜV Certified (TÜV not available on OpenLine)
- Optical Isolation
- OpenLine® and G5 Modules have Built-in Status LED



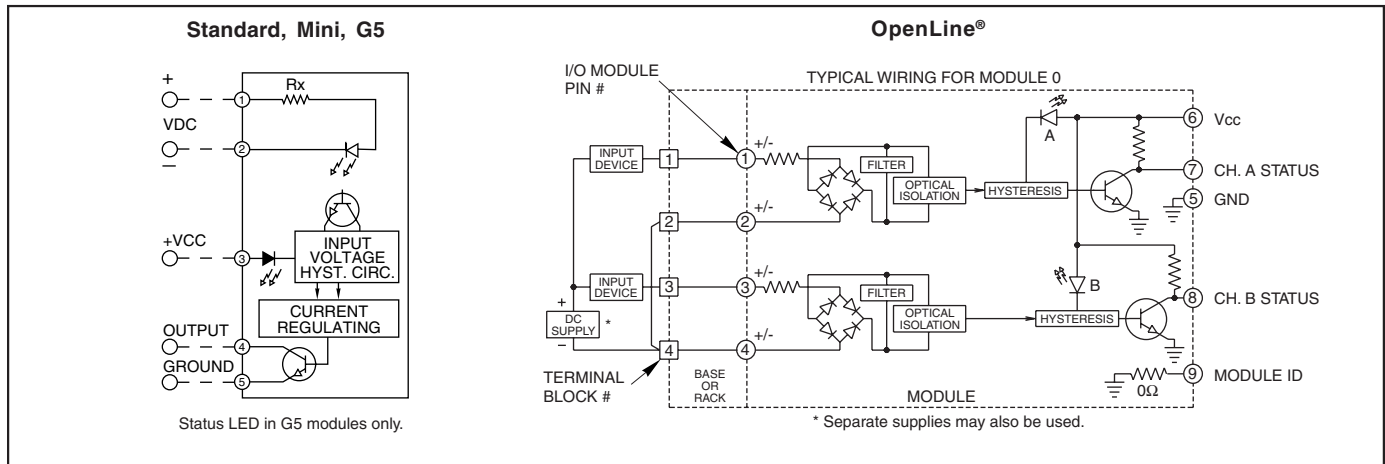
70L-IDC

70G-IDC

70-IDC

70M-IDC

CIRCUITRY



SPECIFICATIONS: By Package Style

| Package Style | | Std (70-) | Mini (70M-) | G5 (70G-) | OL (70L-) |
|--------------------------------|--------------|-------------|-------------|-------------|-------------|
| Specifications | Units | | | | |
| Output Current Range | mA | 1-50 | 1-50 | 1-50 | 1-50 |
| Min. Output Breakdown Voltage | Vdc | 50 | 50 | 50 | 50 |
| Isolation Voltage ¹ | Vrms | 4000 | 4000 | 4000 | 2500 |
| Vibration ² | | MIL-STD-202 | MIL-STD-202 | MIL-STD-202 | IEC68-2-6 |
| Mechanical Shock ³ | | 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 |

¹ Field to logic and channel-to-channel if Grayhill racks are used.

² MIL-STD-202, Method 204, 20 G, 10-2000 Hz or IEC68-2-6, 0.15 mm/sec², 10-150 Hz.

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

SPECIFICATIONS: By Part Number
 Standard and Miniature Modules

| Type/Function | | Grayhill Part Number | | | |
|---|---------|----------------------|-------------|-------------|-------------|
| Miniature, Non-Polarized | | 70M-IDC5G | 70M-IDC5NP | 70M-IDC15NP | |
| Standard, Non-Polarized | | 70-IDC5G | 70-IDC5NP | 70-IDC15NP | 70-IDC24NP |
| Specifications | Units | Units | | | |
| Maximum Input Voltage | Vac/Vdc | 60 | 32 | 32 | 32 |
| Input Voltage Range ¹ | Vac/Vdc | 35-60 | 15-32/10-32 | 15-32/10-32 | 15-32/10-32 |
| Input Current @ Max. Input Voltage | mA | 6 | 18 | 18 | 18 |
| Maximum Turn-on Time | mSec | 10 | 5 | 5 | 5 |
| Maximum Turn-off Time | mSec | 10 | 5 | 5 | 5 |
| Nominal Input Resistance (Rx) | W | 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 |
| Specifications | Units | Units | | |
| Maximum Input Voltage | Vac/Vdc | 60 | 32 | 32 |
| Input Voltage Range ¹ | Vac/Vdc | 35-60 | 15-32/10-32 | 15-32/10-32 |
| Input Current @ Max. Input Voltage | mA | 6 | 18 | 18 |
| Maximum Turn-on Time | mSec | 10 | 5 | 5 |
| Maximum Turn-off Time | mSec | 10 | 5 | 5 |
| Nominal Input Resistance (Rx) | W | 10K | 1.8K | 1.8K |
| Maximum Pick Up Voltage (Output Low) | Vac/Vdc | 35 | 15/10 | 15/10 |
| Minimum Drop Out Voltage (Output High) | Vac/Vdc | 9 | 3 | 3 |
| Nominal Logic Voltage (Vcc) | Vdc | 5 | 5 | 15 |
| Logic Voltage Range: Std & Mini | Vdc | 4.5-6 | 4.5-6 | 10-18 |
| Max. Logic Supply Current @ Nominal Vcc | mA | 10 | 10 | 10 |

OpenLine® Modules

| Type/Function | | Grayhill Part Number |
|---|---------|----------------------|
| Dual, Non-Polarized, Status LED | | 70L-IDCNP |
| Specifications | Units | |
| Maximum Input Voltage | Vac/Vdc | 32 |
| Input Voltage Range ¹ | Vac/Vdc | 15-32/10-32 |
| Input Current @ Max. Input Voltage | mA | 17 |
| Maximum Turn-on Time | mSec | 5 |
| Maximum Turn-off Time | mSec | 5 |
| Nominal Input Resistance (Rx) | W | 1.9K |
| Maximum Pick Up Voltage (Output Low) | Vac/Vdc | 5/10 |
| Minimum Drop Out Voltage (Output High) | Vac/Vdc | 3 |
| Nominal Logic Voltage (Vcc) | Vdc | 5 |
| Logic Voltage Range | Vdc | 4.5-28 |
| Max. Logic Supply Current @ Nominal Vcc | mA | 6/CH |
| Module ID Resistance to Logic Ground | W | 0 |

¹ 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.

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