## FEATURES

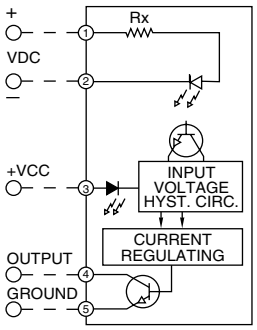
- Transient Protection: Meets the requirements of IEEE 472, "Surge Withstanding Capability Test"
- UL, CSA, CE, TÜV Certified (TÜV not available on OpenLine)
- Optical Isolation
- OpenLine® and G5 Modules have Built-in Status LED
- Lifetime Warranty



70L-IAC 70G-IAC 70-IAC 70M-IAC

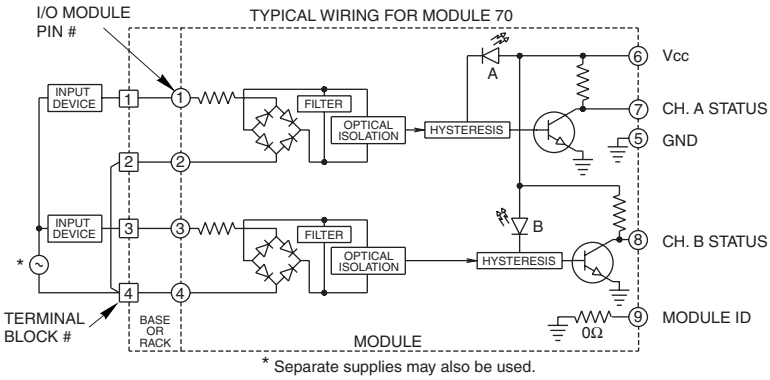
## CIRCUITRY

**Standard, Mini, G5**




Status LED in G5 modules only.

**OpenLine®**




* Separate supplies may also be used.

## 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 |
| Minimum Output Breakdown Voltage | Vdc | 50 | 50 | 50 | 50 |
| Maximum Turn-On Time | mS | 20 | 20 | 20 | 20 |
| Maximum Turn-Off Time | mS | 20 | 20 | 20 | 20 |
| 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.





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## SPECIFICATIONS: By Part Number

### Standard and Miniature Modules

| Type/Function | | Grayhill Part Number | | | | | |
|---|---|---|---|---|---|---|---|
| **Miniature** | | **70M-IAC5** | **70M-IAC5A** | **70M-IAC15** | **70M-IAC15A** | **70M-IAC24** | **70M-IAC24A** |
| **Standard** | | **70-IAC5** | **70-IAC5A** | **70-IAC15** | **70-IAC15A** | **70-IAC24** | **70-IAC24A** |
| **Specifications** | **Units** | | | | | | |
| Nominal Input Voltage | Vac | 120 | 240 | 120 | 240 | 120 | 240 |
| Input Voltage Range[1] | Vac/Vdc | 90-140 | 180-280 | 90-140 | 180-280 | 90-140 | 180-280 |
| Input Current @ Maximum Input Voltage | mA, rms | 8 | 6 | 8 | 6 | 8 | 6 |
| Nominal Input Resistance (Rx) | Ω | 22K | 60K | 22K | 60K | 22K | 60K |
| Maximum Pick-Up Voltage (Output Low) | Vac | 90 | 180 | 90 | 180 | 90 | 180 |
| Minimum Drop-Out Voltage (Output High) | Vac | 25 | 50 | 25 | 50 | 25 | 50 |
| Nominal Logic Voltage (Vcc) | Vdc | 5 | 5 | 15 | 15 | 24 | 24 |
| Logic Voltage Range | Vdc | 3-6 | 3-6 | 8-18 | 8-18 | 15-30 | 15-30 |
| Max. Logic Supply Current @ Nominal Vcc | mA | 10 | 10 | 10 | 10 | 10 | 10 |

### G5 Modules

| Type/Function | | Grayhill Part Number | | | | | |
|---|---|---|---|---|---|---|---|
| **G5, Status LED** | | **70G-IAC5** | **70G-IAC5A** | **70G-IAC15** | **70G-IAC15A** | **70G-IAC24** | **70G-IAC24A** |
| **Specifications** | **Units** | | | | | | |
| Nominal Input Voltage | Vac | 120 | 240 | 120 | 240 | 120 | 240 |
| Input Voltage Range[1] | Vac/Vdc | 90-140 | 180-280 | 90-140 | 180-280 | 90-140 | 180-280 |
| Input Current @ Maximum Input Voltage | mA, rms | 8 | 6 | 8 | 6 | 8 | 6 |
| Nominal Input Resistance (Rx) | Ω | 22K | 60K | 22K | 60K | 22K | 60K |
| Maximum Pick-Up Voltage (Output Low) | Vac | 90 | 180 | 90 | 180 | 90 | 180 |
| Minimum Drop-Out Voltage (Output High) | Vac | 25 | 50 | 25 | 50 | 25 | 50 |
| Nominal Logic Voltage (Vcc) | Vdc | 5 | 5 | 15 | 15 | 24 | 24 |
| Logic Voltage Range | Vdc | 4.5-6 | 4.5-6 | 10-18 | 10-18 | 17-30 | 17-30 |
| Max. Logic Supply Current @ Nominal Vcc | mA | 10 | 10 | 10 | 10 | 10 | 10 |

### OpenLine® Modules

| Type/Function | | Grayhill Part Number | |
|---|---|---|---|
| **Dual, Status LED** | | **70L-IAC** | **70L-IACA** |
| **Specifications** | **Units** | | |
| Nominal Input Voltage | Vac | 120 | 240 |
| Input Voltage Range[1] | Vac/Vdc | 0-140 | 0-280 |
| Input Current @ Max. Input Voltage | mA, rms | 8 | 6 |
| Nominal Input Resistance (Rx) | Ω | 22K | 64K |
| Max. Pick-Up Voltage (Output Low) | Vac | 90 | 180 |
| Min. Drop-Out Voltage (Output High) | Vac | 25 | 50 |
| 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.

[1] For input voltages in the range of 15-32 Vac, or 35-60 Vac, see DC input Modules with the NP or G suffix.