

UI-1 Universal Isolator



FEATURES:

- ◆ Input any analog signal that varies from 0-10v to 0-300v and convert it into 0-10v.
- ◆ Input any pulse train from 0-1300 hz to 0-22k hz and convert it into 0-10v to 0-24v.
- ◆ Low Signal Alarm Output: Relay energized if signal falls below user-definable level.
- ◆ Minimum Output Level: Output level will not go below user-definable minimum. Adjustable from 0v to 24v.
- ◆ Available as a DIN rail mounted module or as a standoff mountable circuit board.

The HAECO UI-1 Universal Isolator contains a number of important features for systems that monitor line speed. First, it converts a pulse train, such as that generated by an Optical Encoder, into a varying output voltage. This voltage can be adjusted to as high as 24vdc and can be used as a rate input into a line-speed tracking event timer. Systems that would normally use a Tach Generator for speed input now can use an Optical Encoder instead, and the on-board 5 volt regulator will supply the power.



The UI-1 also can convert the Tach Generator signals as high as 300vdc into a 0-10v output. If the input signal either from a tach generator or an optical encoder, falls below a user-definable level, an on-board relay will energize and can be used to signal an alarm or shut off a sensitive piece of equipment. The UI-1 produces a user-adjustable minimum output voltage even if no input signal is present. HAECO, supplies the UI-1 either as a DIN rail mountable module or as a pc board with four mounting holes.

SPECIFICATIONS:

PHYSICAL:

- Enclosure: NEMA/EEMAC Type 12 (Mounting bracket kit included to meet UL/CSA external mounting requirements)
- Dimensions: 11.81"H x 9.84"W x 5.91"D (300 x 250 x 150)
- Mounting: 13.43"H x 7.28"W - 1/4 -20 (341 x 185) - M6

PERFORMANCE:

- Time Values: .001-9.999 seconds @ 1 ms. resolution
- Repeatability and Accuracy : ± 0.5 ms.
- Channel to Channel Timing Accuracy: ± 0.1 ms.
- Input Configuration: Single shot "or" duration
- Operating Temperature: 32-140°F (0-60°C)
- Storage Temperature: -22-158°F (-30-70°C)

WARRANTY: 1 year limited

ELECTRICAL:

- Tach Input: max voltage: 300Vdc, input current 0.5 ma @ 300vdc
- Encoder Input:
Frequency: Max 22 khz, Min 80 hz
Vin High: Max 4 vdc, Min 12 vdc
Falltime: Max 10 us
- Power Requirements: 0.1 Amps @ 12 to 26 Vdc (Supply Voltage needs to be 2 volts greater than highest output voltage required)
- 5 Volt Aux. Output: 5 vdc $\pm 5\%$, 200 ma max.
- Low Speed Relay: 125 v ac/dc, 1 amp
- V out Output: 0 to 24 vdc, 15 amp

ORDERING SPECIFICATIONS:

- AC or DC Output
- With or without keyed lock (additional)
- Optional auxiliary power supply, 1.8 Amp, 24 Vdc (additional)
- For NEMA 4 rating specify solid door

www.haeco.us

6504 Snider Road • Loveland, Ohio 45140 • 800-852-3522 • Fax: 513-722-1032