

JH7500 & JH7501

INTEGRATORS (DC TO FREQUENCY CONVERTERS)

FEATURES

- JH7500: Logic Pulse or Open Collector Output
- JH7501: Relay Contact Output
- User-Selectable Input & Output Ranges
- Adjustable Low-End Cutout
- Input/Output Isolated
- Pair with JH7580 for Tone Telemetry
- AC or DC Power Options



DESCRIPTION

Models JH7500 (pulse output) and JH7501 (relay output) integrators produce a frequency (pulse rate) proportional to a DC voltage or current input. The output pulses may be fed to a counter, totalizer, PLC (programmable logic controller) or other device for totalizing (integrating) quantities such as flow or kilowatt hours. Or, the JH7500 may be used for tone telemetry in conjunction with a frequency to DC converter such as the Technology's Model JH7580.

DIP switches allow a wide selection of input ranges and output pulse rates. The integrator may be ordered precalibrated to your ranges or merely tested but not calibrated for any particular range. On Model JH7500 the DIP switches are externally accessible. Its output may be field-converted between logic pulse or open-collector type (cover removal required). JH7501 (relay output) requires removal of the cover to change ranges.

An adjustable low-end cutout prevents false counts under no-flow or zero input conditions. Input/output isolation guards against errors or damage due to ground loops or conflicting system potentials. AC and DC power choices are available.

HOW TO ORDER

Model Numbers:

JH7500: Logic Pulse or Open-Collector Output

JH7501: Relay Contact Output

Power:

Add suffix -AC (example: JH7500-AC) for AC power, -DC for DC power. Specify 115Vac, 230Vac, 12Vdc or 24Vdc.

Input Range:

Select one of the standard ranges listed under "Specifications" (back page). Or, if you prefer to

calibrate it per your system, specify "none". If the range you need is not on the chart, please contact us.

Output Range:

JH7500: Specify any full scale pulse rate between 0.125 Hz (7.5 pulses per minute) and 10kHz.

JH7501: Specify any full scale pulse rate between 1.25 and 160 PPM (pulses per minute) or 0.21 and 2.66 Hz.

If you prefer to calibrate it in your system, specify "none".

Output Type:

JH7500: Specify 5V pulse or open-collector output.

(JH7501 is always relay contact output.)

Low End Cutout:

Normally factory-set to minimum (approx. 0.5% of span). If you wish a higher setting specify any value up to 10% of span.

Urethane Coating:

Specify Option U.

INSTALLATION

JH7500 & JH7501 plug into standard circular relay sockets: 8 pins for JH7500, 11 pins for JH7501. JH Technology offers sockets suitable for DIN-rail or surface mounting (see the Accessories page).

CONNECTIONS - JH7500

Pin 1: Power (AC or, if DC power option, DC plus).

Pin 2: No connection

Pin 3: Power (AC or, if DC power option, DC minus).

Pin 4: No connection.

Pin 5: Input plus.

Pin 6: Input minus.

Pin 7: Output plus. (If open collector, this pin connects to the collector.)

Pin 8: Output minus. (If open collector, this pin connects to the emitter.)

CONNECTIONS - JH7501

Pin 1: Power (AC or, if DC power option, DC plus).

Pin 2: No connection

Pin 3: Power (AC or, if DC power option, DC minus).

Pin 4: Input plus.

Pin 5: Input minus.

Pin 6: Relay NO contact #1.

Pin 7: Relay moving contact #1.

Pin 8: Relay NC contact #1.

Pin 9: Relay NO contact #2.

Pin 10: Relay moving contact #2.

Pin 11: Relay NC contact #2.

SPECIFICATIONS

Standard Voltage Input Ranges:
0/0.8V, 0/1V, 0.2/1V, 0/4V, 0/5V, 1/5V, 0/8V, 0/10V, 2/10Vdc, user-changeable. Others available on special order - contact factory.

Standard Current Input Ranges:
0/0.8mA, 0/1mA, 0.2/1mA, 0/16mA, 0/20mA, 4/20mA, user-changeable. Others available on special order - contact factory.

Output Range, Model JH7500 (Pulse Output):

May be ordered or user-recalibrated anywhere from 0/125 PPM (pulses per minute) to 0/10,000 Hz (pulses per second).

Note: Ranges (spans) greater than 5,000 Hz have an 18 microsecond (approx.) output pulse width. All lower ranges have a 50/50 duty cycle.

Output Types, Model JH7500:
May be ordered with either 5V logic (TTL) pulses or open-collector (NPN) output. Open-collector rated 50V & 40mA max.

Output Range, Model JH7501 (Relay Output):

May be ordered or user-recalibrated anywhere from 0/1.25 to 0/160 PPM (pulses per minute). Output pulse width approx. 100msec.

Output Type, Model JH7501:
DPDT relay. Relay contacts rated 5 amps resistive, 115/230Vac or 30Vdc.

Low End Cutout:

User adjustable from approx. 0.5% of span to approx. 10% of span.

Accuracy & Linearity:

0.1% of span or better.

Isolation:

3-way (Power/Input/Output)
1,500Vac rms (2,100V peak).

Operating Temperature:

-10 to +60°C (14 to 140°F).

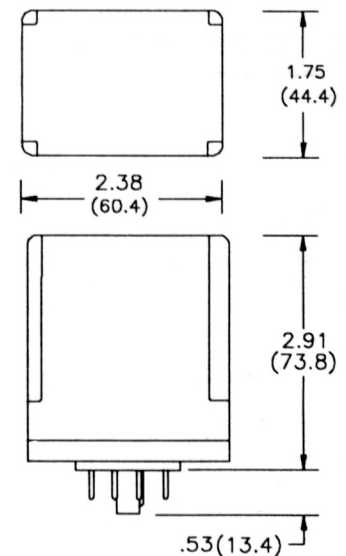
Temperature Stability:

+/-0.02% of span per °C, or better.

Power Requirements:

AC, 115 or 230Vrms, 50/60Hz,
2.5V-A.

DC, 12 or 24V, 2.5W.



JH TECHNOLOGY, INC.

SARASOTA, FL USA
(800) 808-0300

www.jhtechnology.com
e-mail: jhtek@jhtechnology.com