Honeywell

Model UV-10

Bridge Based Sensor In-Line Amplifier



DESCRIPTION

The Model UV-10 amplifier supplies a highly regulated bridge excitation voltage for the transducer and converts the millivolt signal of the transducer to a ±10 Vdc signal. The Universal In-line features two selectable exciation voltages, programmable gain settings, a wide adjustment range on the zero, and a buffered solid-state shunt cal relay for quick calibration.

FEATURES

- Strain gage sensor amplifier
- ±10 Vdc three-wire output
- 3 V, 5 V, or 10 V excitation voltages @ 70 mA
- 18 Vdc to 32 Vdc supply voltage
- NEMA 4 housing
- Increases signal-to-noise ratio in noisy environments
- Effects of voltage drops in excitation sources are eliminated
- Signals may be sent to the data systems from low impedence sources

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Model UV-10

PERFORMANCE SPECIFICATIONS

Characteristic	Measure
Number of channels	1
Case material	Plastic or painted aluminum
Mounting	Use #6 or #8 screws

ENVIRONMENTAL SPECIFICATIONS

Characteristic	Measure
Temperature, operating	-15 °C to 71 °C [5 °F to 160 °F]
Sealing	IP66 or NEMA 4

TRANSDUCER INTERFACE

Characteristic	Measure
Transducer type	Bridge-based sensor
Transducer excitation	3 Vdc, 5 Vdc or 10 Vdc @ 50 mA

AMPLIFIER CHARACTERISTICS

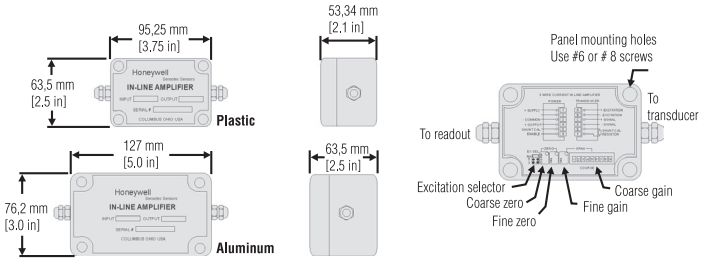
Characteristic	Measure
Supply voltage	18 Vdc to 32 Vdc
Current draw	60 mA
Frequency response (-3 dB)	dc: 7000 Hz with 350 ohm bridge
	dc: 5000 Hz with 5000 ohm bridge
Rise time (0 % to 90 %)	54 µs with 350 ohm bridge
	78 µs with 5000 ohm bridge
Zero adjustment range, coarse	±30 %
Zero adjustment range, fine	±15 %
Span adjustment range	1 mV/V to 20 mV/V, ±25 % fine
Linearity	0.02 % of full scale
Shunt calibration	Solid state relay on board
Output	±10 Vdc
Output current	2.5 mA
Signal-to-noise ratio	65 db
dc power supply rejection ratio	> 110 db

Not RoHS compliant

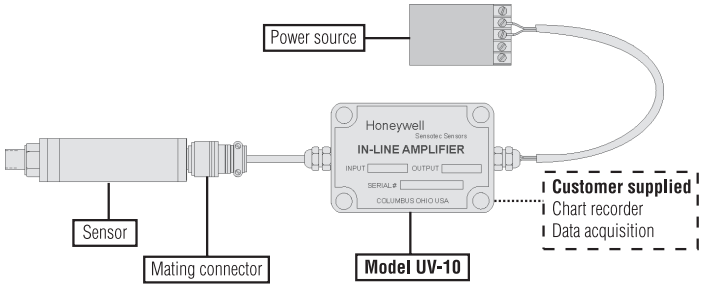
OPTION CODES

2-pole active filter	Many range/option combinations are available in our quick-ship and fast-track manufacture programs. Please see http://sensing.honeywell.com/TMsensor-ship for updated listings.
Filter setting	1 Hz, 3 Hz, 5 Hz, 10 Hz, 20 Hz, 30 Hz, 50 Hz, 100 Hz, 300 Hz, 500 Hz, 1000 Hz

MOUNTING DIMENSIONS AND CHARACTERISTICS



TYPICAL SYSTEM DIAGRAM



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Warranty. Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

⚠ WARNING

PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

⚠ WARNING

MISUSE OF DOCUMENTATION

- The information presented in this datasheet is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

Find out more

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office. To learn more about Honeywell's test and measurement products, call **+1-614-850-5000**, visit **http://measurementsensors.honeywell.com,** or e-mail inquiries to **info.tm@honeywell.com**

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