Honeywell

Model UBP

Universal Bi-Polar In-Line Amplifier



DESCRIPTION

The Model UBP bi-polar amplifier supplies a highly regulated bridge excitation voltage for the transducer and converts the millivolt signal of the transducer to a ± 5 Vdc signal. The Universal In-line features two selectable excitation voltages, programmable gain settings, a wide adjustment range on the zero, and a buffered solid-state shunt cal relay for quick calibration.

FEATURES

- For replacement only, not to be used in new design
- Strain gage sensor amplifier
- ±5 Vdc output
- ±15 Vdc supply voltage
- NEMA 4 housing
- Selectable excitation voltages: 3 V, 5 V, or 10 V @ 70 mA
- 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

Model UBP

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 @ 70 mA |

AMPLIFIER CHARACTERISTICS

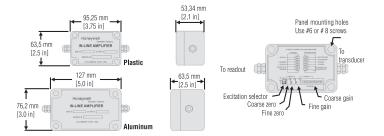
| Characteristic | Measure |
|---------------------------------|---------------------------------|
| Supply voltage | ±15 Vdc |
| Current draw | 70 mA |
| Frequency response (-3 db) | dc to 5000 Hz |
| Zero adjustment range, coarse | ±50 % |
| Zero adjustment range, fine | ±15 % |
| Span adjustment range | 0.5 mV/V to 10 mV/V, ±25 % fine |
| Linearity | 0.01 % of full scale |
| Shunt calibration | Solid state relay on board |
| Signal output | ±5 Vdc |
| Output current | 1 mA max. |
| Signal-to-noise ratio | 65 db |
| dc power supply rejection ratio | > 110 db |
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| dc power supply rejection ratio | > 110 db |

Not RoHS compliant

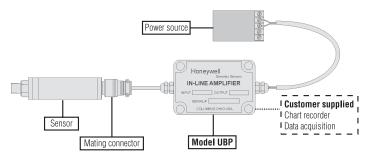
OPTION CODES

| 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 | 50 Hz | |
| | 3 Hz | 100 Hz | |
| | 5 Hz | 300 Hz | |
| | 10 Hz | 500 Hz | |
| | 20 Hz | 1000 Hz | |
| | 30 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.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847 Email inquiries to info.sc@honeywell.com



• 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.



- The information presented in this catalogue 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.

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