## 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  $\pm 5$  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**

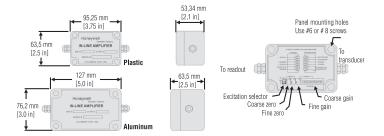
Characteristic	Measure	
Supply voltage	±15 Vdc	
Current draw	70 mA	
Frequency response (-3 db)	dc to 5000 Hz	
Zero adjustment range, coarse	±50 %	
Zero adjustment range, fine	±15 %	
Span adjustment range	0.5 mV/V to 10 mV/V, ±25 % fine	
Linearity	0.01 % of full scale	
Shunt calibration	Solid state relay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

Not RoHS compliant

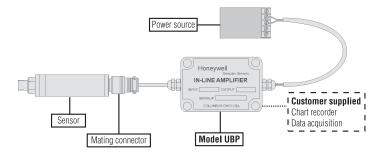
#### **OPTION CODES**

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	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.

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 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.

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