

AccuStar® IP-66 Set-up Guide

PLEASE READ BEFORE USING THIS SENSOR

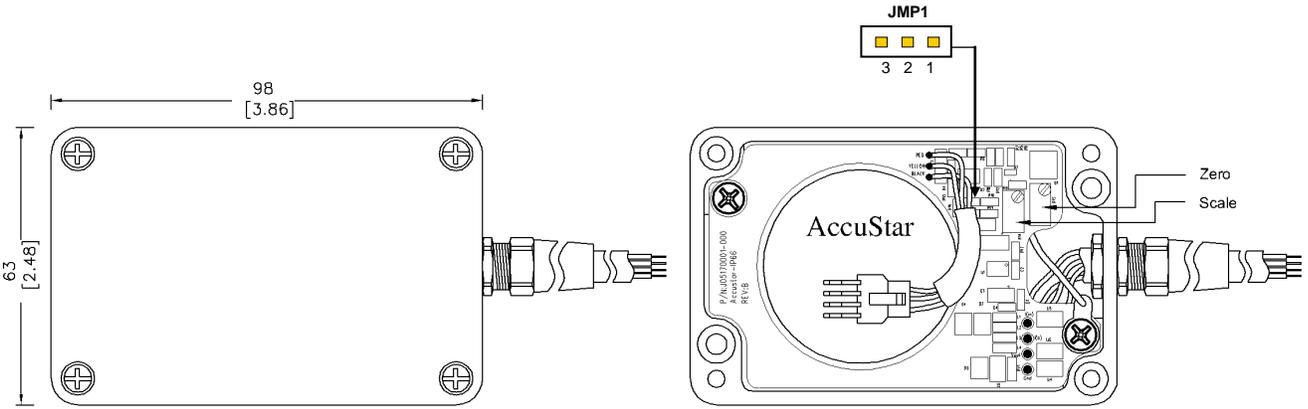
The AccuStar® IP-66 is manufactured to the highest quality standards. Factory testing prior to shipment assures optimum performance in your application. Please handle and install this device with care.

The AccuStar® IP-66 uses a patented, capacitance-based sensor, with no moving parts. When rotated about its sensitive axis, the sensor provides a linear variation in capacitance, which is then converted into 4 to 20 mA and +0.5 to +4.5Vdc output signals relative to the angular position.



SPECIFICATIONS

Linear Ranges:	±3°, 5°, 10°, 15°, 20°, 30°, 45°
Voltage Supply (Un-regulated):	+12 to +30 Vdc (+24 Vdc required for 4 to 20 mA operation)
Output Signal:	+0.5 to +4.5 Vdc / 4 to 20 mA
Zero Point:	+2.5 Vdc / 12 mA
Max. Loop Resistance:	500 Ohm at 24Vdc
Linearity:	Null to +/-10°±0.1° +/- 10° to 45°±1%
Null Repeatability:	0.05°
Cross Axis Error:	<1% up to 45°
Freq. Response (-3dB):	0.5 Hz
Temperature Coefficient: Null:	0.05%/°C
Scale Factor:	0.1%/°C
Operating Temperature: Range:	-25 to +60° C
Dimensions (inches, L x W x H):	3.86 x 2.48 x 1.38



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INSTALLATION INSTRUCTIONS

The AccuStar® IP-66 may be used as a 2-wire current or 4-wire voltage output device (see ELECTRICAL CONNECTIONS below). Mounting is accomplished by using the 2 mounting holes, accessed by removing the front cover. Attachment holes will accommodate up to a #10 mounting screw. Unit must be mounted on a vertical surface.

Note: The AccuStar® IP-66 must be mounted onto a properly grounded metal part. The cable shield (drain wire) should be grounded as well. Maximum current loop resistance should not exceed 500 ohms with a 24-volt loop supply

PROCEDURE

1. Remove the front cover by loosening the four corner screws.
2. Mount and level the unit securely to the target surface with the cable extending to the right.
3. Make electrical connections per the diagram below. Apply power.
4. If necessary, adjust the 'Zero' potentiometer until the output is either 12.0 mA or +2.5Vdc, depending upon desired output type.
5. Reattach cover. Unit is now ready to use.

SCALE CALIBRATION (OPTIONAL)

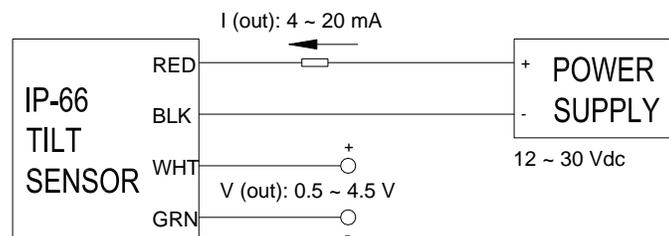
Note: Performing this procedure invalidates the calibration data supplied with the unit!

PROCEDURE

1. Remove the front cover by loosening the four corner screws.
2. Mount and level the unit securely to the target surface with the cable extending to the right.
3. Place the jumper on JMP1 between Pin1 and Pin2 for scaling to ranges between +/-3 and +/-5 degrees output, or between Pin 2 and Pin 3 for ranges of +/-10 to +/-45 degrees.
4. Make electrical connections per the diagram below. Apply power.
5. Adjust the 'Zero' potentiometer until the output is either 12.0 mA or +2.5Vdc, depending upon desired output type.
6. Rotate the unit in a clockwise direction to the desired angle. Adjust the 'Scale' potentiometer until either 20mA's or +4.5Vdc is achieved.
7. Return the sensor to the level position, and adjust the 'Zero' potentiometer if necessary. Repeat steps 5 thru 7 until no adjustment is required.
8. Reattach cover. Unit is now ready to use.

ELECTRICAL CONNECTIONS

Connect to the sensor per the diagram below. Only two wires are required for a current output.



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IMPORTANT NOTICE

Warranty

Measurement Specialties instruments are warranted during a period of one year from date of shipment to original purchaser to be free from defects in material and workmanship. The liability of Seller under this warranty is limited to replacing or repairing any instrument or component thereof which is returned by Buyer, at his expense, during such period and which has not been subjected to misuse, neglect, improper installation, repair, alteration, or accident. Seller shall have the right to final determination as to the existence and cause of a defect. In no event shall Seller be liable for collateral or consequential damages. This warrant is in lieu of any other warranty, expressed, implied, or statutory; and no agreement extending or modifying it will be binding upon Seller unless in writing and signed by a duly authorized officer.

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