



ACCUSTAR®-EA

Electronic Clinometer

SPECIFICATIONS

- ◆ $\pm 60^\circ$ linear sensing range
- ◆ Single-Ended and Bipolar DC models
- ◆ High accuracy / low cost
- ◆ Lightweight and compact
- ◆ Rugged plastic housing
- ◆ CE certified (production availability ~Sept 2016)

The **AccuStar®-EA Electronic Clinometer** is the next generation in the highly acclaimed **AccuStar®** family. Building on the success of the original **AccuStar®**, the **AccuStar®-EA** takes low cost tilt sensing to the next level by combining 100% solid state technology with digital calibration and proprietary filtering techniques. The result is an extremely accurate tilt sensor with improved linearity, expanded linear sensing range ($\pm 60^\circ$), generous operating temperature range (-40° to $+80^\circ\text{C}$), and a 70% reduction in temperature induced errors.

Like its predecessor, the **AccuStar®-EA** measures just 2 inches in diameter, making this compact and affordable sensor the ideal choice where high accuracy tilt measurements are required in space restrictive applications.

The **AccuStar®-EA** mounts easily onto any vertical surface using just two #6 or M3.5 screws. The slot at the base allows for fine adjustment of the zero angle position after installation. With a choice of either Single-Ended or Bipolar DC output models, the **AccuStar®-EA** is designed for easy installation and integration.

Also see our other models, **AccuStar® IP-66** (2-wire current loop or voltage output, IP-66 rating) and the **AngleStar® Protractor System** (**AngleStar®** Electronic Clinometer with digital readout).

Measurement Specialties, Inc. offers many other types of sensors. Data sheets can be downloaded from our web site at: <http://www.meas-spec.com/datasheets.aspx>

FEATURES

- ◆ $\pm 65^\circ$ total sensing range
- ◆ Single-Ended or Bipolar DC operation
- ◆ Rugged plastic housing
- ◆ 18" flying lead termination

APPLICATIONS

- ◆ Wheel alignment
- ◆ Construction equipment
- ◆ Antenna position
- ◆ Robotics

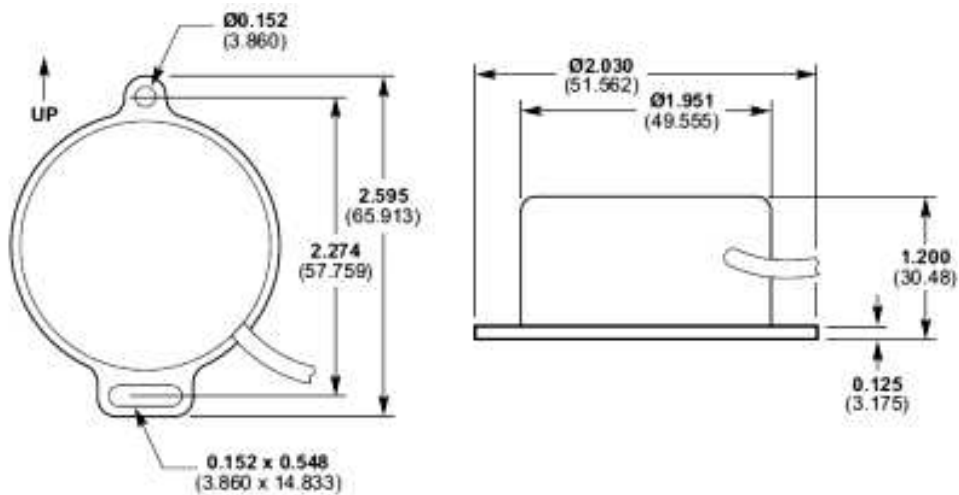
PERFORMANCE SPECIFICATIONS (COMMON)

ELECTRICAL	
Total range	±65°
Linear range	±60°
Linearity	
Null to ±15°	0.075°
±15° to 60°	±0.5% of reading
±60° to 65°	Monotonic
Resolution	0.05°
Null repeatability	0.05°
Cross axis error	<1% up to 90°
Frequency response	2.0Hz @ -3db
ENVIRONMENTAL/MECHANICAL	
Operating temperature range	-40° to +80°C
Storage temperature range	-55° to +80°C
Temp. coefficient of null	0.010° / °C
Temp. coefficient of scale factor	0.01% / °C
Cable	18" flying leads, PTFE insulation
EMC	
Emissions and Immunity	EN 61326-1

Notes:

All values are nominal unless otherwise noted!

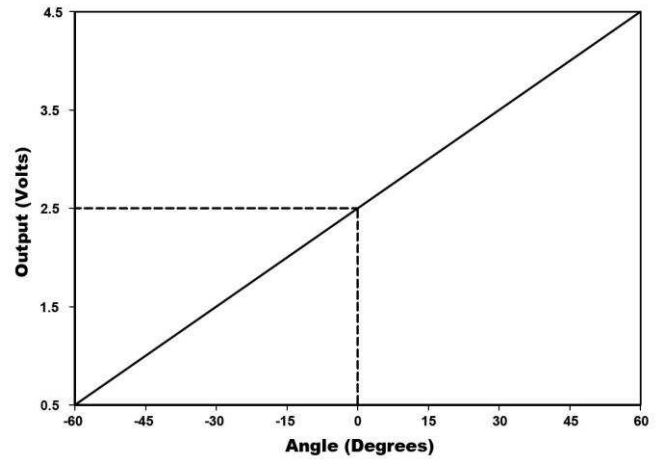
DIMENSIONS (COMMON)



Dimensions are in inches (mm)

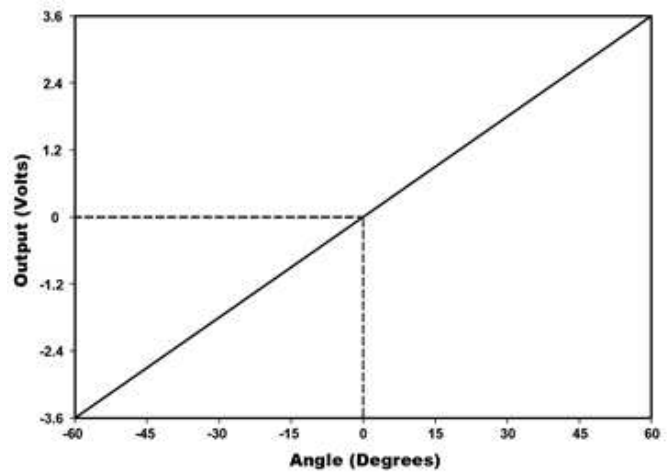
SINGLE-ENDED OUTPUT MODEL

SPECIFICATIONS	
Input voltage	+5 to +30VDC (unregulated)
Input current (max)	5mA
Load resistance (min)	10kΩ
Output	+0.5 to +4.5VDC, ±0.5%
Level output (0°)	+2.5Vdc
ELECTRICAL CONNECTIONS	
Red	+ 5 to +30VDC (unregulated)
Black	Power ground
Yellow	Signal output (referenced to power ground)



ANALOG OUTPUT MODEL

SPECIFICATIONS	
Input voltage range	±8 to ±15VDC
Input current (max)	5mA / supply
Scale factor	60mV / degree, ±0.5%
Load resistance (min)	10kΩ
Level output (0°)	0 VDC
ELECTRICAL CONNECTIONS	
Red	+8 to +15VDC
Black	Power ground
Gray	- 8 to -15VDC
Blue	Signal output (referenced to power ground)



ORDERING INFORMATION

Model	Part Number
Single-Ended	02114002-000
Analog	02115002-000

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Phone: 800-522-6752
Email: customercare.hmpt@te.com

EUROPE

MEAS Deutschland GmbH (Europe)
a TE Connectivity Company
Phone: 800-440-5100
Email: customercare.tlse@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Phone: 0400-820-6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Inclinometers](#) category:

Click to view products by [TE Connectivity](#) manufacturer:

Other Similar products are found below :

[10200021-00](#) [ADIS16209CCCZ](#) [02116009-000](#) [72162000-045](#) [NSG-75/DOG2-JXZ-I-STD](#) [SCA830-D07-1](#) [SCL3300-D01-1](#) [SCL3300-D01-10](#) [02115002-000](#) [G-NSDOG2-200](#) [MXD6240AU](#) [G-NSDMG-023](#)