

AngleStar® Protractor System (APS)



- Complete angle measurement system
- Battery or external powered
- Ranges: $\pm 19.99^\circ$, $\pm 45.0^\circ$ and 0 to $+90^\circ$
- Remote sensing up to 200 feet



DESCRIPTION

The AngleStar® Protractor System (APS) is a ready to use, stand alone system for angle measurements. The system incorporates an AngleStar Electronic Clinometer, a digital LCD display, and a four foot interconnecting cable (cable lengths up to 200 feet are available, consult factory for details).

This system will operate for 500 hours on one 9 volt battery (not included), or may be powered from an external power source between +9 and +15 VDC, drawing minimal current. The display may be mounted up to 200 feet from the sensor for remote sensing applications such as drilling equipment or tower crane overload protection.

There are three systems to choose from; ± 19.99 degrees with 0.01 degree resolution, $\pm 45^\circ$ or 0-90°, both having 0.1 degree resolution.

Also see our other models **AccuStar®-EA Electronic Clinometer** (2 standard input/output configurations), and **AccuStar® IP-66** (2-wire loop powered angle transmitter).

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

- Separate sensor and display
- Remote sensing up to 200 feet
- External power jack
- 1,000 hour battery life
- Integral easel stand for readout

APPLICATIONS

- Crane safety systems
- Crawler drill mast angle
- Antenna positioning
- Machine tool angle
- Platform leveling/monitoring
- Audio speaker array alignment

AngleStar® Protractor System (APS)

PERFORMANCE SPECIFICATIONS

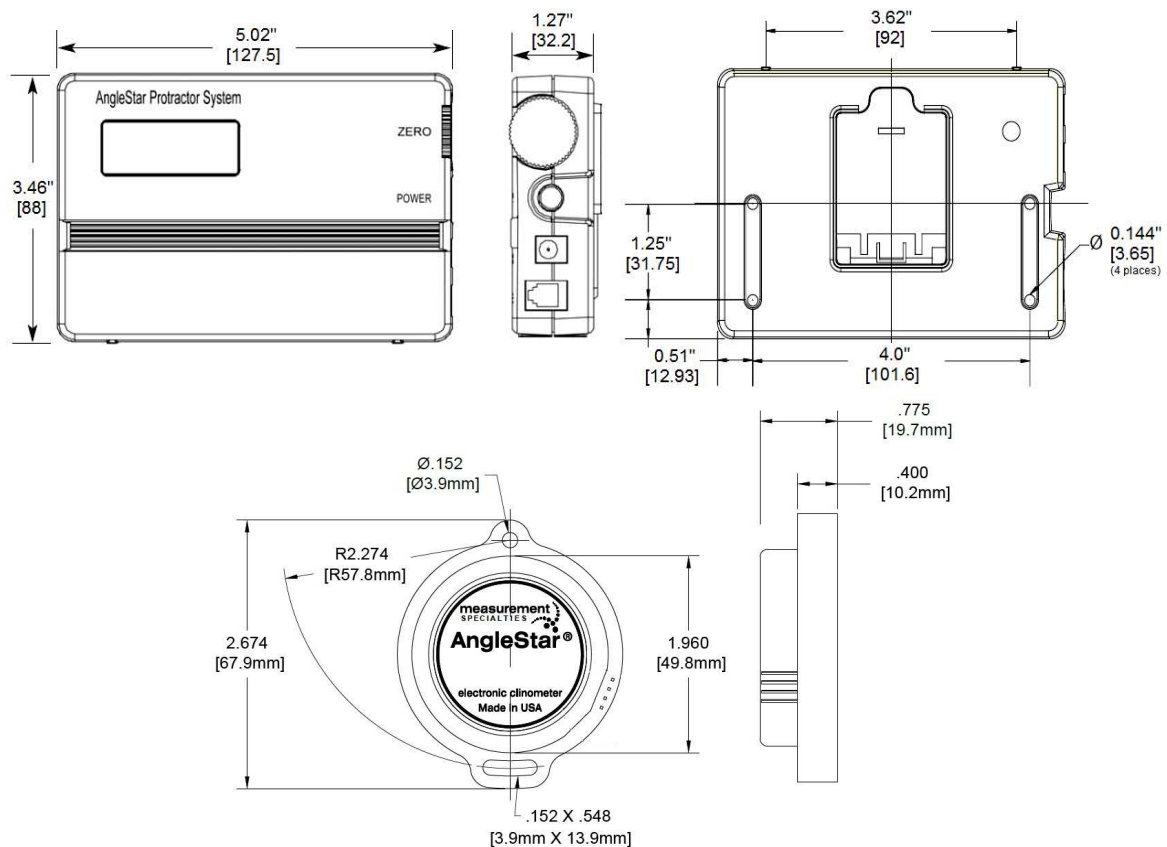
ELECTRICAL	
Battery life	500 hours (approx.)
External power	+9 to +15VDC
Linearity*	
Null to 10°	±0.1°
10° to 45°	±1% of reading
Null repeatability	±0.1°
Cross axis error	<1%
Sensor time constant	0.3 seconds
Sensor frequency response	0.5Hz
ENVIRONMENTAL/MECHANICAL	
Temperature range	-18° to +55°C (0 to +131°F)
Cable	Four conductors, 26 AWG, PVC jacket, 4 foot length standard

Notes:

* Linearity specification applies to Standard and High Resolution systems only!

All values are nominal unless otherwise noted!

DIMENSIONS AND WIRING



Dimensions are in inches [mm]

AngleStar® Protractor System (APS)

ORDERING INFORMATION

MODEL	MEASUREMENT RANGE	PART NUMBER
Standard	±45°	02160021-000
High Resolution	±19.99°	02160023-000
90 Degree	0 to +90°	02160025-000

OPTIONS	
NIST Calibration	0216002X-400

ACCESSORIES	
10 foot cable assembly	04160001-010
20 foot cable assembly	04160001-020
30 foot cable assembly	04160001-030
40 foot cable assembly	04160001-040
50 foot cable assembly	04160001-050
100 foot cable assembly	04160001-100
150 foot cable assembly	04160001-150
200 foot cable assembly	04160001-200

TECHNICAL CONTACT INFORMATION

NORTH AMERICA	EUROPE	ASIA
Measurement Specialties, Inc. 1000 Lucas Way Hampton, VA 23666 United States Phone: +1-800-745-8008 Fax: +1-757-766-4297 Email: sales@meas-spec.com Web: www.meas-spec.com	MEAS Deutschland GmbH Hauert 13 D-44227 Dortmund Germany Phone: +49-(0)231-9740-0 Fax: +49-(0)231-9740-20 Email: info.de@meas-spec.com Web: www.meas-spec.com	Measurement Specialties China Ltd. No. 26, Langshan Road High-tech Park (North) Nanshan District, Shenzhen 518057 China Phone: +86-755-33305088 Fax: +86-755-33305099 Email: info.cn@meas-spec.com Web: www.meas-spec.com

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.