

# 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 a special **AccuStar I** ratiometric 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 1,000 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;  $\pm 19.99$  degrees with 0.01 degree resolution,  $\pm 45^\circ$  or  $0-90^\circ$ , both having 0.1 degree resolution.

Also see our other models, **AngleStar® DP-45** (handheld digital protractor), **AccuStar® Electronic Clinometer** (4 standard input/output configurations), and **AccuStar® IP-66** (2-wire loop powered angle transmitter).

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

*MEAS acquired Schaevitz Sensors and the **Schaevitz®** trademark in 2000.*

## 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

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## PERFORMANCE SPECIFICATIONS

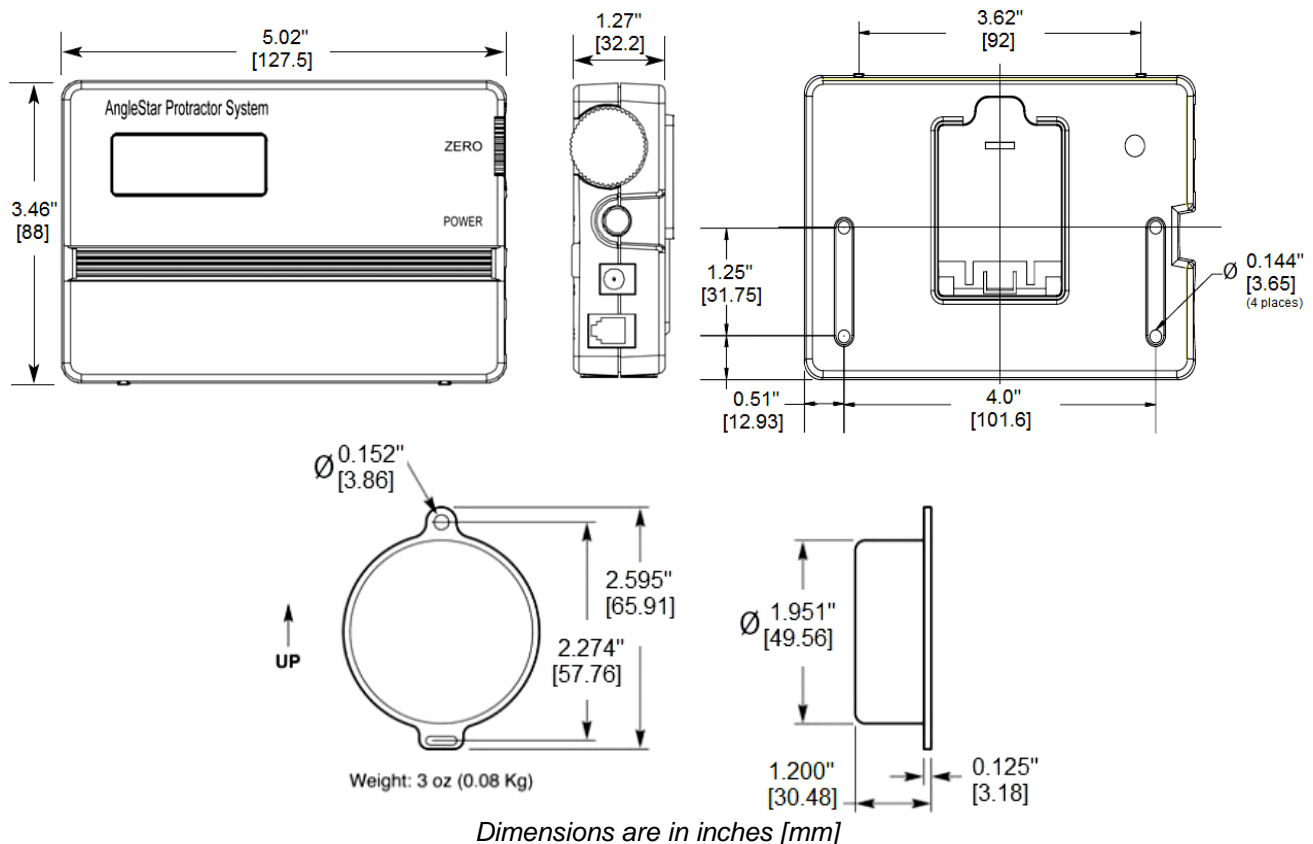
ELECTRICAL	
Battery life	1,000 hours (approx.)
External power	+9 to +15VDC
Input current	<0.1mA
Linearity*	
Null to 10°	±0.1°
10° to 45°	±1% of reading
Null repeatability	±0.1°
Cross axis error	<1%
Sensor time constant	0.3 seconds
Sensor frequency response	0.5Hz
ENVIRONMENTAL/MECHANICAL	
Temperature 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



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## ORDERING INFORMATION

MODEL	MEASUREMENT RANGE	PART NUMBER
Standard	±45°	02160001-000
High Resolution	±19.99°	02160003-000
90 Degree	0 to +90°	02160005-000
ACCESSORIES		
10 foot cable assembly		04160000-010
20 foot cable assembly		04160000-020
30 foot cable assembly		04160000-030
40 foot cable assembly		04160000-040
50 foot cable assembly		04160000-050
100 foot cable assembly		04160000-100
150 foot cable assembly		04160000-150
200 foot cable assembly		04160000-200

## TECHNICAL CONTACT INFORMATION

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