

# ACCUMEASURE™ AS-563

## Capacitance Sensor Amplifier (OEM Board)

HIGH-PRECISION PROBE  
AMPLIFIER FOR  
GROUNDED TARGETS

12.5mm (0.5")  
RANGE

EXCEPTIONAL REPEATABILITY  
HIGH LINEARITY

The Accumeasure™ AS-563 OEM board is intended for Original Equipment Manufacturers that require a single channel capacitance probe amplifier to measure position of grounded targets. The AS-563 can be rack mounted or free mounted using a pig-tail connector and works with MTI standard or custom single ended (single sensor) probes.

### Features

- **Sub-micron Resolution**
- **Interboard Synchronization**
- **Interchangeable Filter Board**
  - 10Hz, 500Hz, 1 kHz, 2kHz and 5kHz available
- **Built-in Offset Button with LED Indicator**
  - Allows the user to shift the gap output voltage over a 10VDC range (Field Calibratable)
- **Adjustable Gain Control**
  - Allows user to shift the slope sensitivity (Field Calibratable)
- **Two Connectors Built-in**
  - P2 (50-pin PCB edge connector)
  - P3 (Molex 50-57-9407)

### Best for Applications, Such as:

- Servo-loop Positioning Control
- Precision Dimensional Gauging
- Lens Adjustment/ Focusing Control
- Flatness and Profile Measurement
- Vibration Monitoring
- Shaft Run-out and Analysis
- Lobing Measurement
- Brake Rotor & Spindle Runout
- Screw Thread Quality Inspection

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## Standard Specifications

The following specifications listed are for the "Standard" configuration with 1Xrange. Custom specifications available.

Measurement Range <sup>1</sup>	0 to 12.5mm (0.500inch)
Dynamic Resolution <sup>2</sup>	0.000075%/vHz FSR RMS
Linearity <sup>3</sup>	±0.02% FSR
Repeatability <sup>3</sup>	±0.01% FSR
Frequency Response (Factory Selectable)	DC to 5kHz
Warm-up Up time	1 Hour
Temperature Stability	±0.01% FSR/°C
Time Stability <sup>3</sup>	±0.01% FSR/100 hours
Output Signal <sup>4</sup>	0 to 10VDC
Power	±15VDC (20mV AC ripple), 3.9W
Operating Temperature	4 to 40°C (40 to 100°F)
Storage Temperature	-15 to 65°C (5 to 150°F)
Dimensions (LxWxH) <sup>5</sup>	239.27x99.95x21.54mm (9.42x3.94x0.85h)
Mass	0.198g (0.437lbs)

[1] Dependent on probe type selected.

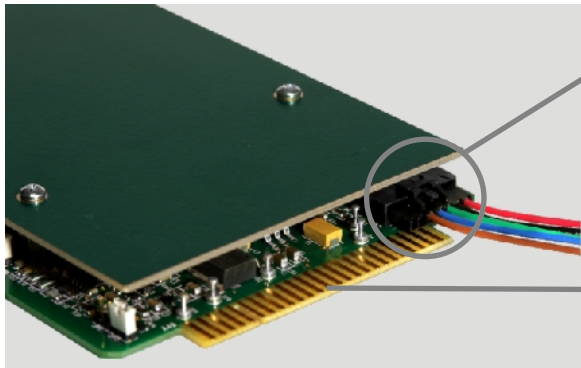
[2] 100-5kHz. Equivalent to 0.00167% FSR @500Hz RMS.

[3] After 100hours site acclimation, warm up, 20°C, 100kPa, 50% (Temperature, Pressure, Humidity).

[4] Signal Proportional to probe gap.

[5] Includes connectors which extend beyond the PCB.

## Optional Accessories



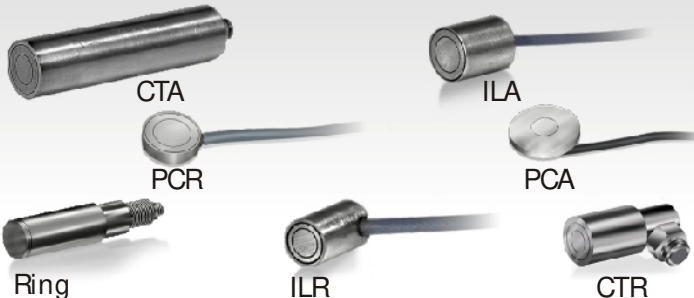
### P3 Wiring Harness

- 1 Meter Pig Tail
- Power and Analog Out Synchronization

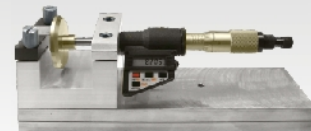
### P2 Mating Connector

- 50 Position
- 0.1" (2.54mm) Spacing

### Standard Probe Sensors (Custom Probes Also Available)



### Calibrators



### Filter Board



One Filter Board Included  
Choose from:  
10Hz, 500Hz, 1 kHz, 2kHz or 5kHz

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