Capacitec®

Gapman® Solutions

The new Capteura 210 Single Channel Amplifier extends the Gapman Solutions to real-time gap sensing and displacement measurements.

Capacitec introduces the highest thermal stability Signal Conditioner with analog output Capteura 210 SINGLE CHANNEL AMPLIFIER

The Capteura 210 Single Channel Amplifier features a compact design which is optimized for OEM application. Capacitec's new amplifier consolidates several modular components with this new Integrated Amplifier. The Capteura 210 allows you to optimize critical sensitivity over multiple ranges of Interest for your application. This package reduces costs and advances the art of exceptional thermal stability with proven long-term reliability.

Capteura Model 210-SCP

Capteura Model 210-SLCP

The Capteura 210 Single Channel Amplifier extends the Gapman Solutions portable applications across arrange of online real-time gap sensing and displacement measurement uses. The 210 supports Capacitec's extensive family of sensors and probes and is ideally suited for a wide range of Applications. **Such as:**

- Aerospace & Defense
- Semiconductor & Microelectronics
- Automotive (R&D and Production)
- Metrology / Calibration Labs
- Industrial Automation & Robotics
- Machine Tools & Spindle Monitoring
- Energy (Turbines, Fuel Cells, Cryogenics)
- Glass, Paper, or Film Thickness Monitoring
- Slot Die Coating Calibration & Production Monitoring
- Research Institutes & Universities

The Capteura 210 Single Channel Amplifiers are ideally suited to OEM Applications due to their High Performance, Low Cost, and multiple configurations are available from Capacitec.

The Capteura 210 Single Channel Amplifier accepts a wide power input range of 5 to 12 VDC. Other integrated feature highlights include:

- Single Channel low noise integrated amplifier with Analog Output
- On board high-stability excitation (clock)
- BNC sensor Input Connector
- M8-6pin front connector provides access to both DC power and Analog Output
- Exceptional Temperature Stability – 50 PPM/ °C
- Better than 100,000:1 resolution (25nm) with HPC-150E-A-L2-1-B sensor, at 200Hz bandwidth, over a 2.5mm range (double the range of competitive systems)
- 200Hz -3dB Bandwidth Standard
- 1KHZ, 4Hz, or 12KHz Bandwidths Optional
- 32 pin DIN DC power and Analog Output Rear-connector (optional)

Specifications

Model 210 Amplifier Specifications

Enclosure Size		1.18"x 4.25" x 4.28" (30mm x 108mm x 109mm –Flange)
Bandwidth		200Hz -3dB Standard Optional 1KHZ, 4Hz, or 12KHz Bandwidths Available
Range		Typically 2/3 sensor diameter
Temperature Stability		50 ppm/°C temperature coefficient from 0 to 60°C - ***Industry Best!***
Low Noise, High Resolution		0.1nm measurement resolution, HPC-150E-A-L2-1-B, 250 µm range, 200Hz
Linearity	**Model 210-SCP**	+/- 2% of full scale or better with range of 2/3 sensor diameter
Linearity	**Model 210-SLCP**	+/- 0.2% of full scale or better with range of 2/3 sensor diameter
ESD		20 kV electrostatic discharge to probe sensor, guard, or electronic rack
Power Consumption		2.5 Watts
Input		BNC female connector
Extension Cable Input		Cable length change of <10 foot (3.05m) affects the output by less than 0.2% FS
Output		0-10 VDC, +/- 10 VDC, or 0-5 VDC (specify for calibration)
Output Type		Type Single-ended or differential outputs standard (specify for calibration)
Quadrature Output	**Model 508-SWQ**	For material density studies

Get in Touch

Ready to move beyond traditional feeler gauges?

Tell us About your Application

Capacitec's advanced gap measurement solutions deliver greater accuracy, reliability, and efficiency than those outdated mechanical options. Our application engineers are here to help you optimize your operations.

Email an Application Engineer: sales@capacitec.com

Explore or solutions: www.capacitec.com

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