



210 SINGLE CHANNEL AMPLIFIER

Capteura® 200 Series Non-Contact Displacement Sensing System

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, advances the art of exceptional thermal stability with proven long-term reliability.



The Capteura Model 210-SCP



The Capteura Model 210 SLCP

The **Capteura 210 Single Channel Amplifier** accepts a wide power input range of 5 to 12 VDC. Other integrated features 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 including a 2-meter cable
- A Mating Male M8 6-Pin connector with a 1.5 meter cable
- 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 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)
- Extremely long cable length with a capacitive load of 1500 pF

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

M8 – 6 Pin I/O Specification



M8 CONNECTOR PIN#	COLOR	FUNCTION	COMMENT
1	Brown	Analog Vout+	Analog Output High
2	White	Analog Vout-	Differential Output Low (-1x of Vout+). Use Pin 1-2 for Analog differential output
3	Blue	5 to 12 VDC supply	Power Supply 5 VDC at 500mA or 12 VDC at 210 mA
4	Black	Supply (return) GND	Power Supply Return
5	Grey	Sensitivity (float)	Short to ground for secondary sensitivity
6	Pink	Analog GND	Pin 1-6 for Analog single-ended output

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