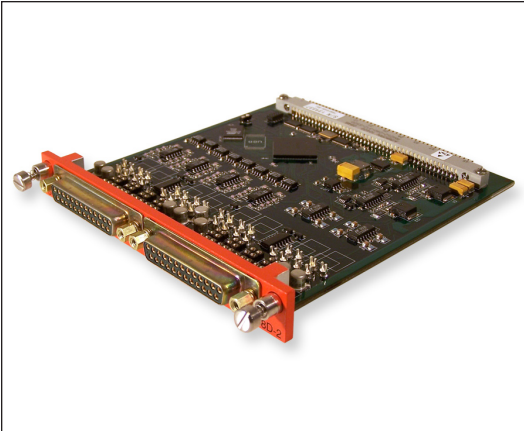


8-Channel Signal Conditioning Card - Voltage Excitation, Bridge Completion, Programmable Digital Filtering & Simultaneous Sampling



Applications

- Flight Test Instrumentation
- Factory Automation & Process Control
- Accelerometers, Strain Gages, Load Cells, Pressure Transducers, ...
- Research Measurements and Experiments

Features

- 8-Channels per Card
- Simultaneous Sampling Capability
- Programmable Digital FIR or IIR Presample Filtering
- Software selected FIR filters: 120, 90, 60 and 40 Taps
 - 120 Tap FIR filter provides comparable response to 12-pole Butterworth Filter
 - Software selected IIR filters: 6-pole and 8-pole Butterworth, 6-pole Bessel and 6-pole Chebyshev
 - Automatic adaptive filter based on format sample rate
 - Analog anti-aliasing filter
- Bridge or Potentiometer Inputs
 - 1/4, 1/2, 3/4 and Full Configurations
 - On card Completion of up to 3 Arms
- Programmable Voltage Excitation
- Constant Current Excitation
- Programmable AC or DC Input Coupling
- Programmable Gain and Offset
 - >10,000 settings from 1 to 2,000
- Zero, RCAL and Voltage Substitution Calibration
- >1,000 Megohms Input Impedance (Power On)
- $\pm 0.5\%$ System Accuracy
- Automatic parasitic offset correction on power-up and ZCAL. This feature can be disabled.
- $\pm 35\text{VDC}$ Overvoltage Protection
- Compatible with WDAU-20XX operating to 20Mbps
- Windows 95/98/NT/2000/XP Software Included

Description

The SCD-608D is an 8-channel plug-in signal conditioning card for use in TTC's EDAU-20XX, CDAU-220XX and MDAU-20XX products. The card is intended for applications that require significant signal conditioning flexibility and simultaneous sampling capability. The card provides AC and DC input coupling, constant current and constant voltage excitation, numerous bridge and potentiometer input configurations, programmable presample filtering, calibration, and user programmable gain and offset. FIR or IIR digital presample filtering may be selected. Each digital filter is phase locked to the channel format sample rate to maintain time correlation between the input signal and the PCM output. The filter can be set for 3, 4, 5, 6, 8 or 10 times oversampling (the filter -3dB point will be automatically set to the format sampling rate divided by the oversampling value). The conditioned analog signal is digitized at up to 16-bit resolution for transmission in the system PCM output format.

Revision 03/09/2009

SCD-608D-2 Datasheet

©2009 Teletronics Technology Corporation
 Specifications subject to change without notice.



Teletronics Technology Corporation
 15 Terry Drive, Newtown, PA 18940
 phone: 267.352.2020 fax: 267.352.2021 Sales@ttcdas.com

www.ttcdas.com