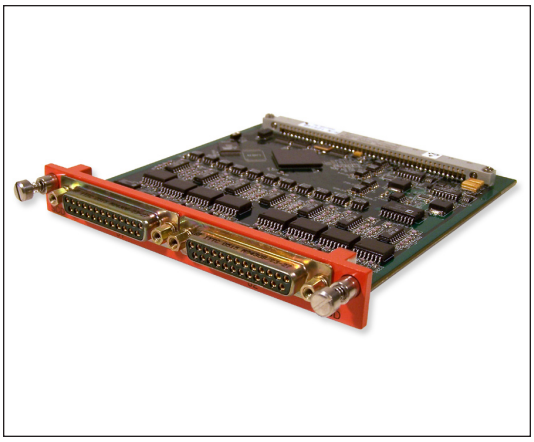
TELETRONICS TECHNOLOGY CORPORATION

SCD-116D-2 Datasheet

16-Channel Signal Conditioning Card - Voltage Excitation, Programmable Digital Filtering, & Simultaneous Sampling



Applications

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

Features

- 16-Channels per Card
- Simultaneous Sampling Capability
- Programmable Digital FIR or IIR Presample Filtering
  - Multiple Finite-Impulse-Response (FIR) filters
  - Software selection of 120, 90, 60 and 40 Tap FIR filters
  - 120 Tap FIR filter provides comparable response to 12-pole Butterworth Filter
  - Stop Band Attenuation of 85dB
  - Multiple Infinite-Impulse-Response (IIR) filters
  - Software selection of 6-pole and 8-pole Butterworth,
- 6-pole Bessel and 6-pole Chebyshev filters
  - Analog anti-aliasing filter
  - Automatic adaptive filter based on format sample rate
- Programmable Voltage Excitation
- Programmable Gain and Offset
  - >10,000 settings from 1 to 1,000
- Zero and Voltage Substitution Calibration
- >1,000 Megohms Input Impedance (Power On)
- ± 0.25% System Accuracy (Auto Cal Enabled)
- ± 0.5% System Accuracy (Auto Cal Disabled)
- > 1 Megohm Input Impedance (Power Off)
- Automatic parasitic offset correction on power up and ZCAL. This feature can be disabled.
- ±35VDC Overvoltage Protection
- Windows 95/98/NT/2000/XP Software Included

Description

The SCD-116D is a 16-channel plug-in signal conditioning card for use in TTC's EDAU-20XX and CDAU-20XX products. The card is intended for applications that require high channel density and significant signal conditioning flexibility and/or simultaneous sampling capability. The card provides constant voltage excitation, 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.

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AS9100 ISO 9001 KEMA CERTIFICATE

CAIS Compatible

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