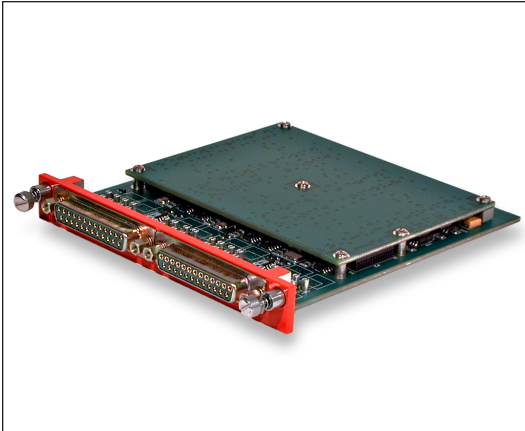


## 16-Channel Signal Conditioning Card - Voltage Excitation, Programmable Digital Filtering, & Simultaneous Sampling



### 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 Presample Filtering
  - 32 tap finite-impulse-response (FIR) filters
  - Approximates 12 pole Butterworth Filter
  - Stop Band Attenuation of 85dB
  - Analog anti-aliasing filter
  - Automatic adaptive filter
- 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)
- $\pm 0.25\%$  System Accuracy (Auto Cal Enabled)
- $\pm 0.5\%$  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.
- $\pm 35\text{VDC}$  Overvoltage Protection
- Compatible with WDAU-20XX operating to 20Mbps
- Windows 95/98/NT/2000 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 significant signal conditioning flexibility and simultaneous sampling capability. The card provides constant voltage excitation, programmable presample filtering, calibration and user-programmable gain. The FIR filter is phase locked to the channels 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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### SCD-116D Datasheet

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 Specifications subject to change without notice.



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