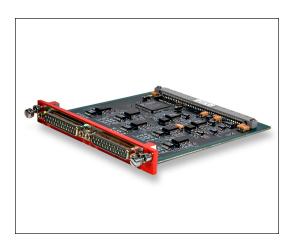


16-Channel Differential Analog Multiplexer with A/D Conversion



Applications

- Flight test instrumentation
- · Factory automation and process control
- Measurement of pre-conditioned analog signals, battery voltages, ...
- Research measurements and experiments

Features

- Software programmable analog inputs, differential or single-ended per channel
- 16 channels per card
- On-card A/D conversion, up to 12-bit resolution
- Per-channel, factory set attenuation
- Per-channel, programmable gain from 1 to 1000 in >10,000 steps
- Automatic parasitic offset correction on power-up and ZCAL (this feature can be disabled)
- Per-channel, programmable offset, up to +/-50% RTO offset in 4,096 steps
- Programmable constant voltage excitation 2 sources per card
- Zero and voltage substitution calibration
- >1,000 MOhms input impedance (power on)
- ± 0.5% system accuracy
- Windows software included

Description

The AMD-116P is a 16 channel differential analog multiplexer card for use in TTC's EDAU-20XX or CDAU-20XX series products. Each channel provides programmable gain (1 to 1,000), programmable offset, programmable differential/single-ended input and fixed pre-sample filtering. Zero calibration and voltage substitution are provided. The conditioned analog signal is digitized on-card at up to 12-bit resolution for transmission in the system PCM output format. The card can accept voltages from various system sources including sensors, transducers, batteries, and other pre-conditioned analog voltages. The unit also provides constant voltage excitation that is programmable to +10VDC or +5VDC. Each excitation output provides up to 160 mA and can be shared among multiple sensors/transducers.



