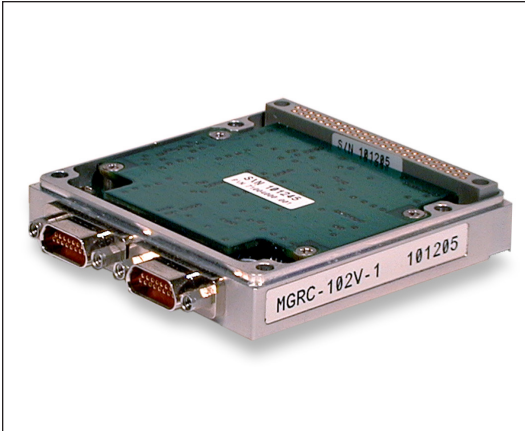


## 2-Channel Auto Gain Ranging Conditioner Module



### Applications

- Flight Test Structural and Dynamic Measurements
- Microphone/Acoustic Measurements
- Strain Gages, Potentiometers, Pressure Transducers, ...

### Features

- 2 Channels per Module
- Fixed gain, Auto Gain Range or Down-only Gain Range Modes
  - Dynamic Gain Adjustment
  - Provides Max Signal Resolution
- Simultaneous or Sequential Sampling Capability
- Constant Voltage Excitation
- Programmable Gain
  - 1, 4, 16, 64, 256, and 1024
  - Programmable on per Channel Basis
- Programmable AC/DC Coupling
  - Active Offset Correction in AC Mode
  - AC Common Mode up to  $\pm 30V$
- $\pm 0.5\%$  System Accuracy
- Programmable Presample Filtering
  - 6-pole Butterworth Presample Filter
  - 4 Programmable Cut-off Frequencies
- Average of Absolute Value of Waveform
- Zero & Voltage Substitution Cal
- 1,000 Megohms Input Impedance
- $\pm 35VDC$  Overvoltage Protection
- Windows 95/98/NT/2000 Software Included

### Description

The MGRC-102V is a 2-channel automatic gain ranging module for use in TTC's MEDAU/MCDAU products. The module provides constant voltage excitation and conditioning for 4-arm bridge inputs, simultaneous sample capability, calibration, programmable gain, and presample filtering with 4 programmable cutoff frequencies. The data is digitized at up to 12-bit resolution and, along with four bits of gain and status information, is transmitted in the system PCM output format. The average of the absolute value of the signal is also available for transmission in the PCM output.

Revision 05/12/2015

### MGRC-102V Datasheet

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Specifications subject to change without notice.

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CAIS  
Compatible



Management  
System  
AS9100C  
ISO 9001:2008

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