

THE FLYING 560H

A Unique Application for The Model 560H Instrumentation Amplifier

The Model 560H is a versatile, differential dc amplifier with excellent accuracy (0.1%), stability (1 $\mu\text{V}/^\circ\text{C}$), frequency response (dc to 200 kHz), and reliability. Its characteristics enable it to be used as a general-purpose amplifier but its performance allows it to be popular as a dedicated, high-accuracy data collection amplifier.

One application of this product is unique. This Ectron amplifier was chosen as the data collection amplifier that rides at the hub of many of the world's largest centrifuges. The Ectron amplifier was selected because of its accuracy, dc stability, and overall precision even under vibration conditions. It receives data from accelerometers, strain gages, and other sensors used with these huge machines. Up to 90 Model 560H amplifiers are used on each centrifuge.

Of particular importance is the ability of the Ectron Model 560H amplifier to reject EMI signals that emanate from the huge drive motors as well as some of the on-board electronics.

To complete the 500 Series amplifier products, we also offer the Model 563H. This model adds an excitation supply and bridge completion components to the same amplifier, allowing the 563H to provide full support for bridge-type sensors such as strain gages, load cells, and similar transducers.

Other Applications

1. Used in large data-logging systems. These compact conditioner-amplifiers (16 channels in a 3 U enclosure) allow high channel count in a small volume yet provide high-accuracy, low-noise data.
2. Most data loggers have 1% to 5% accuracy because of poor input amplification. The Models 560H and 563H are frequently used preceding data-logging instrumentation when low-level or high-accuracy signals are involved.
3. Used as a general-purpose lab amplifier. Cal labs as well as many colleges and universities use these amplifiers because of their versatility: excellent low-level performance, excellent linearity, wide bandwidth.
4. Because these amplifiers have excellent reliability and stability with changing temperatures they are used on board larger aircraft. However, Ectron's rugged 400 series conditioner-amplifiers are frequently better choices here.
5. Railway testing systems use the Model 563HL conditioner-amplifiers on board rail test cars as well as rail car wheel test systems. Again, the stability and accuracy of the 500 Series amplifiers were key factors in their selection.

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CORPORATION

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