

Flexstar 60A Altitude Tester

Flexibility, accuracy and repeatability in high-altitude testing

- Altitude control from -1,500 to 40,000 feet
- Temperature control from -30°C to +85°C
- Full range temperature cycling at 0.67°C per minute

The Flexstar 60A altitude tester enables consistent, repeatable simulation of high altitudes and high and low temperatures.

The system was engineered to provide uniformity of airflow to minimize temperature gradients within the chamber. The chamber can be controlled from -30°C to +85°C with RH from 5% to 95%.



The combination of the Flexstar software, single board computer and network power margin board provides the bandwidth and flexibility to be able to handle the fastest drives at maximum speed and to be able to handle up to four storage devices per port.

Individual drive bays may be programmed to run different tests at the same time. Drives that have failed or completed their testing or may be removed and replaced while tests are still running in the rest of the chamber. Failed drives can be debugged in place while the tests continue to run and serial port data capture capability enables access to the device under test even if the interface is not responding.

The Flexstar 60A tester supports all of the industry-standard storage device interfaces, including Fibre Channel, SCSI, SAS, FireWire, SATA, PATA, CE-ATA, ATAPI and USB. The anti-vibration fixtures are designed to house a single 5.25", 3.5", with optional drop-ins for 2.5" or 1.8" drives.

The Flexstar advanced environmental testers enable flexible, accurate and repeatable mass environmental testing for any storage device.

Product Specifications

Input Power Requirements

- Voltage: 230V AC three phase
- Frequency: 50 to 60Hz

Mechanical

- Exterior Dimensions: 92" x 61" x 82" (234 cm x 155 cm x 208 cm)
- Chamber:
 - Two towers at 16" x 17" x 46" (40.6 cm x 43.2 cm x 116.8 cm)
 - Capacity: 60 drives

Environmental

- Temperature range: -30°C to + 85°C
- Temperature control: +/- 1°C at site level
- Rate of change: Average 0.67°C per minute depending on load
- Altitude range: -1,500 to 40,000 feet depending on model
- Altitude control: +/- 500 feet
- Rate of climb: site level to 20,000 feet in 4 minutes

Power Margining

- Current measurement range: 0 to 5 amps with 0.6 milliamps resolution
- Current measurement accuracy: +/- 1% of full scale
- Voltage measurement range: 0 to 15V with 3.6 mV resolution
- Voltage measurement read back accuracy: +/- 0.5% of full scale
- Power sampling: Up to 4096 samples for each channel
- Power sampling rate: 1 to 255 milliseconds in 1 millisecond increments
- On-board memory for power sampling data acquisition

Key Features

- Thermal control from -30°C to +85°C
- Seek timing tests: 1 track, 1/3 stroke, maximum track, and average seeks
- Easy software upgrades via the remote boot architecture
- Comprehensive parametric testing
- Chamber control and synchronization via the test script

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