



## ATS-500 High Power Testing

Consolidated, functional test, part of the ATS-5000 Series

### Ultimate Flexibility

Astronics has been providing high power test solutions for a variety of UUTs throughout the transit industry over the last decade. From GTO and IGBT based chopper LRUs to high-speed circuit breakers we have consistently developed safe, specification compliant Bench Test Equipment for all of your high-power testing requirements.

The ATS-500-HP can be configured to test most power electronics in a rail car such as:

- Auxiliary Power Systems 100KVA+
- Single and multi-phase inverters
- DC to DC Converters
- Full load testing for AC and DC LRUs and LLRUs
- Dead battery starters
- Rail gap detectors
- Propulsion drive systems
- High Speed Circuit Breakers

Fully integrated safety systems to protect the operator.

Astronics Test Systems delivers your solution with an open architecture based on industry standards for fast, easy configuring and efficient operation.

The ATS-500-HP is your state-of-the-art choice to ensure optimal performance of critical systems.

### Test It All

#### Services:

- Engineer-to-engineer collaboration and customization
- Interface Test Adapter Development
- Program management
- Installation and ongoing support

**Expandable.** ATS-500-HP is based on an open architecture and industry standards, including PXI, LXI, GPIB, IVI, IEEE-488, USB, Windows and others.

Configure your system as you need it now and add as you go to expand in size, power, and functionality.

### KEY BENEFITS

- **Save time and cost** -complete turnkey solution
- **Upgradable, modular, and configurable** - select COTS instruments to configure, update, or expand functionality to meet your exact requirements
- **Efficient** - consolidated footprint to maximize space in your depot or factory
- **Flexible** - based on industry-standard instrumentation such as LXI, PXIe, and others
- **Supportable** - dedicated engineering, factory, and field support staff





**Software.** Astronics' proven TestCue® software comes standard.

With TestCue® you receive intuitive, easy-to-use system software that minimizes your time and cost to deliver, run, and maintain test program sets. With plugins to COTS software such as LabView, test programs sets are easily created.

**Manufacturing At Scale.** With more than 150,000 square feet of certified manufacturing capability, our manufacturing processes follow industry-standard quality guidelines set forth in ISO 9001 and AS9100, as well as CMMI. We can manufacture one unit or thousands, depending on your need.

**All from the Logistics Experts.** Astronics Test Systems excels at delivering complete logistics support, with installation, training, and support engineers deployed to your location.

Astronics' long history of field support and obsolescence management ensure long term success and maximum utilization of your functional test investment.

## Get Started Today

For additional details, please contact Astronics Test Systems.

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## ATS-500-HP SPECIFICATIONS

### CAPABILITIES

- Full functional test of power LRUs and LLRUs
- Back trace to the faulty component.
- Ethernet, LAN and serial interfaces
- Perform on board flash verification and programming.
- Diagnostic self-test capability for the tester will be provided including diagnostic to module level.
- Guided Probe Diagnostics providing automatic isolation of failing devices

### DIGITAL I/O

- Configurable to meet your voltage range
- Scalable from 32 pins to more than 256 pins. Mixed signal flexibility at every pin.

### SAFETY

- Integrated safety systems
- Hardware controlled safety locks
- Hardware controlled voltage monitoring
- Locking mechanisms prevent input power to the unit under test if safety conditions are not met.

### ANALOG

- Astronics 6.5-digit Digital Multimeter
- Frequency Timer/Counter
- COTS Oscilloscope
- Ability to perform parallel testing of Analog and Digital circuits at all I/O pins
- High current probes
- High voltage probes

### PXIe

- 18 slot PXIe Chassis for COTS instrument

### BUS EMULATION

- Serial Bus Capabilities - I2C, SPI, UART, USART, CAN, USB, RS232, RS485, RS422, Ethernet, ESPI, 1-Wire, MICROWIRE
- Parallel Bus - IEEE-488

### POWER

- Integrated third rail DC power 2000V+
- 100 KVA
- Serviceable 15KW power supplies built up to required input power
- Full complement of selectable loads