

Power Processing Systems

ABC-1000

High Current Cycling Station

- Test High-Current Drivetrains & Components
- Ideal for Evaluating Super Capacitors & Ultra Capacitors
- Powerful Computer Control
- Bi-Directional Load Capability



High Current Test Capability:

- Voltage Range 8 to 420VDC
- Current Range ± 1000 ADC
- Power Range ± 125 kW
- Easy Front Panel Connections
- Dual Independent Channels

ABC-1000 . . . The High Current Test Solution!

The ABC-1000 is AeroVironment's high-current cycling solution. This system is ideal for testing applications that require high current and medium range voltage capabilities. The ABC-1000 is used to test super capacitors and ultra capacitors, as well as high-current components.

INPUT RATING	3 Phase, 480Vrms
CURRENT	168Arms
FREQUENCY	60Hz (50Hz optional)
ISOLATION TRANSFORMER	Internal Transformer
POWER FACTOR	> 99%
HARMONIC DISTORTION	< 3% THD
MULTIPLE USER INTERFACES	Manual; Remote Operation System (ROS); DCOM Driver for LabVIEW, C++ and Visual Basic; CAN

OPERATING RANGE:

Configuration	Voltage (Vdc)	Current (Adc)	Power (kW)
Independent	+8 to +420	-500 to +500	-125 to +125
Parallel	+8 to +420	-1000 to +1000	-125 to +125
WEIGHT	3500 lbs (1591 kg)		
DIMENSIONS	72"W x 76.5"H x 36"D (183 cm W x 194 cm H x 92 cm D)		

ABC-1000 Technical Specification

Utility Requirement

Voltage	3 Phase, 480Vrms, +10%/-15%, <5% imbalance
Current	168Arms
Frequency	60 ± 2Hz (50 ± 1Hz optional)
Isolation Transformer	Internal Transformer

AC Power Quality at Rated Power

Power Factor	0.99
Harmonic Distortion	< 3% THD, IEEE 519 Compliant

DC Output, Operating Range

Mode	Voltage (Vdc)	Current (A _{dc})	Power (kW)
Independent (2 Channels)	+8 to +420	-500 to +500	-125 to +125
External Parallel (1 Channel)	+8 to +420	-1000 to +1000	-125 to +125

The above ranges are the maximum allowed by the system; none may be exceeded. Voltage, current and power limits within the ranges can be set by the user based on the load and the test requirements.

Accuracy & Resolution	Accuracy (±)	Resolution
Voltage	250mV or 0.15% of the reading	20mV

Current	Accuracy (±)	Resolution
Independent (2 Channels)	250mA or 0.25% of the reading	20mA
External Parallel (1 Channel)	450mA or 0.35% of the reading	40mA

Current Ripple on DC Output

Independent & Parallel Mode	< 65mArms and 130mArms, respectively
Max Ripple from Load	< 15Arms

Operating Environment

Temperature	0-35°C
Humidity	5-90% non-condensing

Additional Features

- Remote Voltage Sense
- Independent Mode Control for Each Output Channel
- Analog Control Signal
- Reverse Voltage Protection
- Independent Output Enabled
- Multiple User Interfaces: Manual; AV Remote Operation System (ROS); Windows DCOM Driver for LabView, Visual Basic, C++, Studio.NET; CAN (for use with existing CAN bus)

Safety

- Remote Emergency Switch Available
- Automatic Shutdown on Loss of Power
- Load Disconnect Protection
- Independent Channel Shutdown
- Emergency Cutoff Switch

Physical Specification

Dimensions	72"W x 76.5"H x 36"D (183cm W x 194cm H x 92cm D)
Weight	3500 lbs (1591 kg)

** All specifications are subject to change without notice.*