



ELEV High Power DC Power Electronic Load

2-2

Electrical Measurement



Features:

- High efficient, power line regenerative control DC electronic load
- Controlled and/or front LCD touch panel operation with display for voltage, current, power and status
- Simple operation - no deep menus to contend with
- Input max voltage of 50V~1000V, current 40A ~ 800A, power 20kW ~ 600kW
- High power density.
- Over-voltage, over-current, shunt protection, power semiconductor overheat protection.
- Communication reaction fastest time of 100ms.
- RS-485 interfaces as standard.
- DC input ON / OFF switch.
- Emergency stop with lock switch as a standard feature.

Applications:

- aerospace test
- telecommunications and IT industry
- automated test systems (ATE)
- Factory Automation
- Quality Inspection, battery testing, discharging
- production line power
- solar applications, research and development of new energy

Description:

The Advance Instrument Inc. ELEV Series is a line of high power DC electronic loads used to test power sources such as batteries, power supplies, generators, chargers, fuel cells, etc.

Power ratings start at 20KW; standard models have maximum test capabilities of 50, 200, 400, 600 and 1000 volts. High current and power operation are achieved via parallel connection in a master/slave configuration. Individual units are capable of up to 600KW and 800 amperes.

Programming of current and voltage and current limits may be achieved by analog means or by RS 485 digital control. GPIB or Ethernet interfaces are factory installed options.



ELEV High Power DC Power Electronic Load

Specification:

- Setting control: Touch panel Setting.
- Display : System and input information via LCD Display
- Input maximum voltage: 105% of rated
- Input maximum current: 105% of rated
- Cooling fan system
- Protection features, over voltage protection, shunt protection, over current protection, over temperature protection, current limit setting, supply voltage high / low protection ($\pm 10\%$)
- Withstand voltage input output on chassis 2250VDC 1 minute, chassis 1500VDC 1 minute

Input		Model	Input Capacity (W)	Resolution		AC Input (3Ø 380V 4W 50/60Hz)
Voltage	Max Current			Voltage	Current	Power
V	A			F.S %	F.S %	VA
10~1000	40	ELEV-1000-040A	40K	0.1%	0.1%	50kVA
	60	ELEV-1000-060A	60K	0.1%	0.1%	75kVA
	80	ELEV-1000-080A	80K	0.1%	0.1%	100kVA
	120	ELEV-1000-120A	120K	0.1%	0.1%	150kVA
	160	ELEV-1000-160A	160K	0.1%	0.1%	190kVA
	200	ELEV-1000-200A	200K	0.1%	0.1%	240kVA
	250	ELEV-1000-250A	250K	0.1%	0.1%	290kVA
	300	ELEV-1000-300A	300K	0.1%	0.1%	350kVA

Customized special specifications						
Input		Model	Input Capacity (W)	Resolution		AC Input (3Ø 380V 4W 50/60Hz)
Voltage	Max Current			Voltage	Current	Power
V	A			F.S %	F.S %	VA
10~1000	450	ELEV-1000-450A250K	250K	0.1%	0.1%	300kVA
Dimension: $W \leq 2450\text{mm}$, $D \leq 1200\text{mm}$, $H \leq 2200\text{mm}$ Option: EMI test standard Class A and report for CNS 13438, CNS13803, EN55022, EN 55011, EN 61000-6-4 EMS test standard and report for IEC 610006-2, EN 64000-6-2, IEC61326-1, EN61326-1 GPIB interface. The GPIB interface is in addition to the standard RS 232 Ethernet interface (in addition to the standard RS 232)						

Note 1: The series operating maximum voltage 1000V.

Note 2: The All continues to pursue product improvement, therefore specifications are subject to change without notice.

Note 3: Accept customized special specifications.

Operating ambient temperature: $0 \sim 40^\circ\text{C}$; Humidity: 30% ~ 90% RH (non-condensing)

Storage ambient temperature: $-20 \sim 70^\circ\text{C}$; Humidity: 10% ~ 90% RH (non-condensing)

The output end of the back-plane terminal or copper bus

Note: The above test environment to boot after 30 minutes, ambient temperature $23 \pm 5^\circ\text{C}$, ambient humidity below 80% RH, AC power supply voltage of $\pm 5\%$, the frequencies $\pm 5\%$.