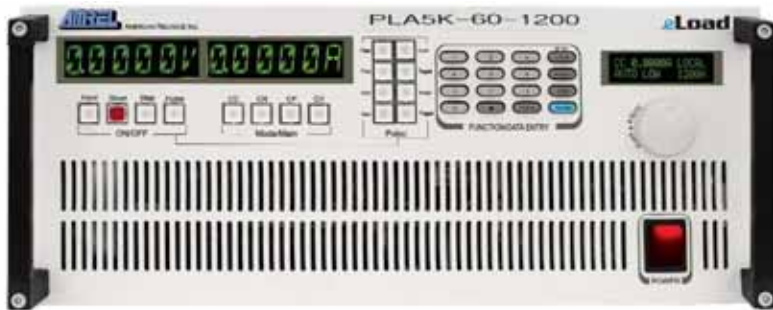


PLA Series of Programmable

Why Choose the PLA Series?

Traditional dc Electronic Load Solutions are bulky and large in size. Most are offered with standard voltage, current and power ratings. In the ATE world, rack space is a highly coveted asset and application demands are constantly diversifying with new technology development.

AMREL's PLA Series of "Air-cooled" dc Electronic eLoads offers the industry's smallest footprint, the highest power density and current rating, along with the broadest selection of high voltage models on the market. PLA models are capable of being custom-tailored to meet your application requirements.



Markets and Applications:

- Battery/Energy Storage/Ultracapacitor Testing and Validation
- dc Power Supply and Battery Charger Validation and Testing
- Fuel Cell Durability, Lifetime and Performance Characterization
- Single Cell and Short Stack Fuel Cell Characterization
- EIS/Impedance Measurement
- Defense/Aerospace and Avionics ATE, Electronics and Power Sources Testing
- Thin-film, Single- & Poly-silicone PV Design Validation and Testing
- Power Supply, Power Electronics/Components Validation and Testing
- Industrial Applications: Generator/Alternator, UPS/Battery Banks, Datacenter Backup Power, and Automotive Power Electronics & Components
- Lab/Bench-top Applications: Ideal for R&D, Testing and QC Engineers
- Power Electronics/Components, dc Distribution & dc-dc Converters
- Universities
- National Research Labs

PLA SELECTOR GUIDE

PLA XXX - YY - ZZZ - OPTION*
XXX -POWER | YY - VOLTAGE | ZZZ - CURRENT

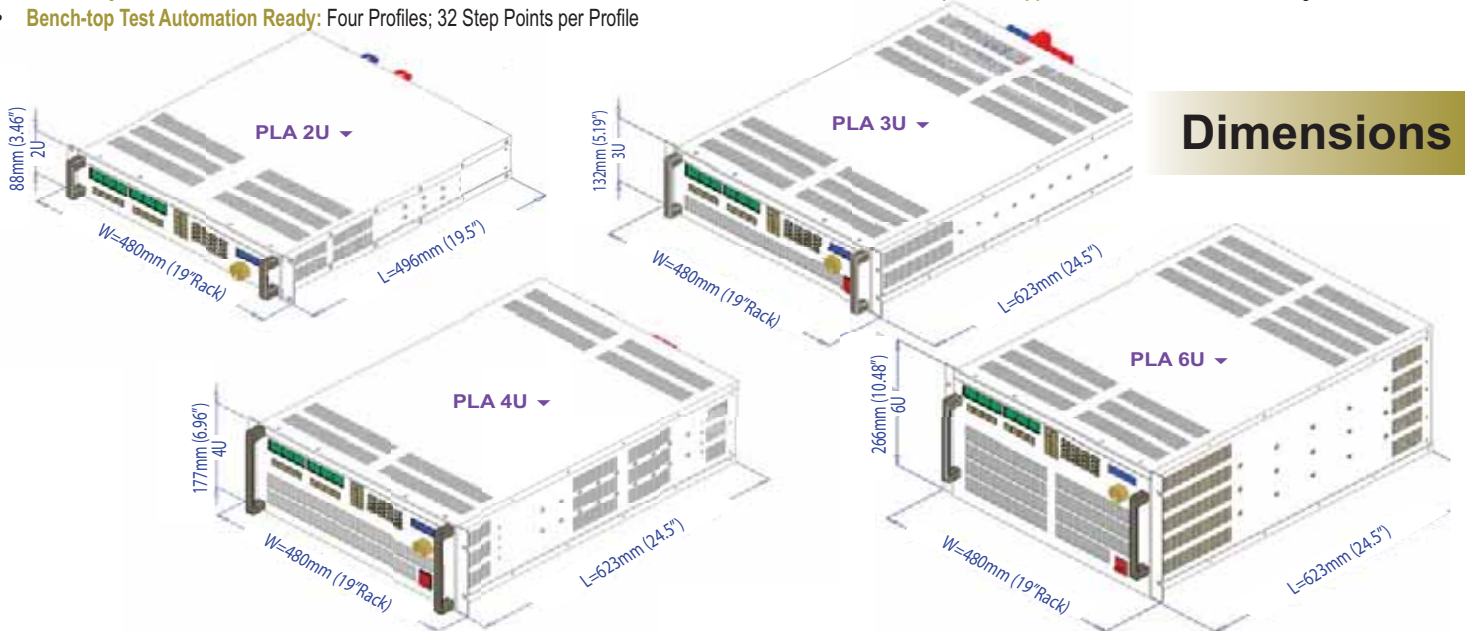
I=Isolated Analog Programming Option*

R=Isolation Relay Option*

Series	Model #	Power (W)	Voltage (Vdc)	Current (Adc)	V _{MIN} at I _{MAX}	Size (Height, Depth)
PLA	PLA800-60-300	800W	60	300	0.6V	2U, 21"D
PLA	PLA800-120-150	800W	120	150	1.8V	2U, 21"D
PLA	PLA800-400-50	800W	400	50	2.7V	2U, 21"D
PLA	PLA800-600-30	800W	600	30	7.8V	2U, 21"D
PLA	PLA1.5K-60-600	1.5kW	60	600	0.6V	2U, 21"D
PLA	PLA1.5K-120-300	1.5kW	120	300	1.8V	2U, 21"D
PLA	PLA1.5K-400-100	1.5kW	400	100	2.7V	2U, 21"D
PLA	PLA1.5K-600-60	1.5kW	600	60	7.8V	2U, 21"D
PLA	PLA2K-60-600	2kW	60	600	0.6V	3U, 25.5"D
PLA	PLA2K-120-400	2kW	120	400	1.8V	3U, 25.5"D
PLA	PLA2K-400-150	2kW	400	150	2.7V	3U, 25.5"D
PLA	PLA2K-600-100	2kW	600	100	8.4V	3U, 25.5"D
PLA	PLA2.5K-60-1000	2.5kW	60	1000	0.6V	3U, 25.5"D
PLA	PLA2.5K-120-600	2.5kW	120	600	1.8V	3U, 25.5"D
PLA	PLA2.5K-400-200	2.5kW	400	200	2.7V	3U, 25.5"D
PLA	PLA2.5K-600-120	2.5kW	600	120	7.8V	3U, 25.5"D
PLA	PLA3K-60-1000	3kW	60	1000	0.6V	3U, 25.5"D
PLA	PLA3K-120-800	3kW	120	800	1.6V	3U, 25.5"D
PLA	PLA3K-400-300	3kW	400	300	2.7V	3U, 25.5"D
PLA	PLA3K-600-150	3kW	600	150	7.2V	3U, 25.5"D
PLA	PLA4K-60-1200	4kW	60	1200	0.6V	4U, 25.5"D
PLA	PLA4K-120-1000	4kW	120	1000	1.8V	4U, 25.5"D
PLA	PLA4K-400-360	4kW	400	360	2.7V	4U, 25.5"D
PLA	PLA4K-600-200	4kW	600	200	7.8V	4U, 25.5"D
PLA	PLA5K-60-1200	5kW	60	1200	0.6V	4U, 25.5"D
PLA	PLA5K-120-1200	5kW	120	1200	1.8V	4U, 25.5"D
PLA	PLA5K-400-400	5kW	400	400	2.8V	4U, 25.5"D
PLA	PLA5K-600-240	5kW	600	240	7.8V	4U, 25.5"D
PLA	PLA7.5K-60-1500	7.5kW	60	1500	0.6V	6U, 25.5"D
PLA	PLA7.5K-120-1500	7.5kW	120	1500	1.8V	6U, 25.5"D
PLA	PLA7.5K-400-600	7.5kW	400	600	2.7V	6U, 25.5"D
PLA	PLA7.5K-600-400	7.5kW	600	400	8.4V	6U, 25.5"D
Additional standard models above 7.5kW and up to 250kW+ are available. Please contact AMREL for more details.		Voltage Range: 10Vdc ~ 1200Vdc Rating Current Range: 10Adc ~ 5000Adc Rating Power Range: 600W ~ 100KW+ Rating Custom-tailored Ranges Available		EFU-L = Field Upgradeable Ethernet & USB Available		

Key Features and Benefits:

- **Broadest Model Selection:** 800W, 1.5kW, 2kW, 2.5kW, 3kW, 4kW, 5kW, 7.5kW, 10kW, 15kW, 20kW Models and Higher-power PLA Systems Over 100kW
- **Exclusive High Voltage Models:** Standard 60V, 120V, 400V & 600V Voltage Ratings and widest selection of exclusive 800Vdc and 1200Vdc PLA Models
- **Save Rack Space:** PLA Models Offer Ultra-compact air-cooled Footprint and are "Zero" Stackable
- **Maximize ROI:** In-rack Closed-case Calibration Without an "Outside" Calibration Lab
- **Ultra-low Compliance Voltage:** Ultra-low Voltage Operation @ 1000's of Amps
- **Reliable:** Individual FET Protection to Isolate Power Stage Failures
- **Maximized Uptime:** Redundant Over-temperature and Over-power Protection
- **Fast Response:** 50µs Independently Programmable Rise/Fall Time
- **Ultra-quiet Operation:** Fan Speed Control for Reduced Acoustic Noise Under Light Load Conditions.
- **Flexible Test Platform:** Five Modes of Operation: CC, CR, CV, CP and Pulse Load Shaping
- **Intuitive Front Panel Control:** User-friendly Function Hot Keys, Full Keypad & Digital Encoder
- **Integrated DMM:** 14-bit Five digit Voltage and Current Measurement Display
- **Two Loads in One:** Ultra-low Current Range Option for Optimized Accuracy
- **More Ranges:** Three Full Scale Ranges (100%, 50% & 10%)
- **More Protections:** Anti-oscillation & Programmable Protections: OV, UV, OC, UC, OP, & UP
- **More Interfaces:** Co-resident GPIB/RS-232 and Optional Field-upgradeable Ethernet/USB
- **ATE Ready:** Standard LabWindows and LabVIEW Drivers and SCPI Command Set
- **Bench-top Test Automation Ready:** Four Profiles; 32 Step Points per Profile
- **Fuel Cell Application Ready:**
 - Impedance Measurement via Frequency Response Analyzer (FRA)
 - Current Interruption Mode for Fuel Cell Testing
 - Ultra-low Compliance (0.1Vdc) Voltage to Operate at High-current
 - Virtual Panel provides Polarization Curve Sweep and Voltage/Current Cycling Capability
- **0 ~ 10Vdc PLC or DAQ Control Ready:**
 - External Analog Programming
 - External On/Off Control
 - External Mode Selection
 - Front Panel Key Lockout Prevents Unwanted Key Entry
- **More System Integration Features & Options:**
 - Standard Remote Inhibit (RI) for Interlock Capability
 - Standard Dry Contact Fault for Redundant System Protection
 - Isolated Analog Control/Monitor Option
 - External dc Contactor Option
 - Reverse Polarity/Isolation Relay Option
- **Battery Testing:** "C" Operand for Battery Testing.
- **Ideal for Unique Test Applications:** Custom-tailored Ratings & Features Available



PLA SPECIFICATIONS

CV MODE SPECIFICATIONS		CC MODE SPECIFICATIONS	
CVL RANGE	0 ~ 10% of Vmax	CCL RANGE	0 ~ 10% of Imax
CVM RANGE	0 ~ 50% of Vmax	CCM RANGE	0 ~ 50% of Imax
CVH RANGE	0 ~ 100% of Vmax	CCH RANGE	0 ~ 100% of Imax
ACCURACY	0.05% of Value ± 0.1% of Rating	ACCURACY	0.05% of Value ± 0.1% of Rating
RESOLUTION	1/16000 of Rated Voltage	RESOLUTION	1/16000 of Rated Voltage
TRANSIENT TIME (SLOW)	0.500 ~ 511.9 (ms)	TRANSIENT TIME (SLOW)	0.500 ~ 511.9 (ms)
TRANSIENT TIME (FAST)	0.500 ~ 51.19 (ms)	TRANSIENT TIME (FAST)	0.050 ~ 51.19 (ms)
CR and CP MODE SPECIFICATIONS		PROTECTION	
PLEASE REFERENCE WEBSITE DATASHEET FOR DETAILS		OVER POWER PROTECTION	110% * Pmax
		OVER VOLTAGE PROTECTION	105% * Vmax
		OVER CURRENT PROTECTION	110% * Imax
		OVER TEMPERATURE PROTECTION	90°C ± 5°C
		REVERSE MAXIMUM CURRENT	110% of Imax
		REMOTE INHIBIT (RI)	Short
		FAULT INDICATOR	SPDT Relay
		OTHER PROGRAMMABLE PROTECTIONS: OPP, OVP, OCP, UVL & ANTI-OSCILLATION	
GENERAL SPECIFICATIONS		DIELECTRIC STRENGTH	
REMOTE INTERFACES	RS-232, GPIB & USB/ETHERNET	PRIMARY CIRCUIT TO CHASSIS	1500Vac for 1 Minute
ANALOG PROGRAMMING	0 ~ 10Vdc	PRIMARY CIRCUIT TO LOAD TERMINAL	1500Vac for 1 Minute
ACCURACY	Mode Accuracy ± 0.1% of Rating	LOAD TERMINAL TO CHASSIS	1500Vdc for 1 Minute
VMON ACCURACY	0.10% of RDG ± 0.1% of Rating		
IMON ACCURACY	0.10% of RDG ± 0.1% of Rating		
FREQUENCY RANGE	0.1Hz ~ 10kHz		
DUTY RANGE	1.000 ~ 100.0%		
FREQUENCY & DUTY ACCURACY	0.1% of Setting		
AC INPUT	95~240Vac 48 ~ 62Hz		
OPERATING TEMPERATURE	5°C ~ 40°C		