PX Electronics' Electronic DC Load Provides High Accuracy Measurements of Voltage & **Current with the Features and** Flexibility you Need — at a Price That Fits Your Budget.

Quality and Reliability

PX Electronics, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing. PX's sophisticated technology provides companies the edge in design verification and product manufacturability.

Specifications are subject to change without notice. Please visit www.pxelectronic.com for full specifications and ordering information







Industry's Easiest-To-Use DC Load - PX Electronics PXe-DL Series Electronic Loads are available in a multiple configurations to meet your unique application requirements. No other electronic DC load on the market today is easier to use. Equipped with a full color LCD touchscreen display, the unit can quickly be set up for your next test. In addition, the DL is equipped with a comprehensive self-test that ensures that all loading and measurement circuitry is functioning properly.

Extremely Flexible in a Variety of Applications - The PXe-DL Series is equally at home generating kW, W, mW or µW loading. Whether you are performing tests for LED drivers, batteries or battery chargers, the PXe-DL Series is the right choice for these applications.

Maximum Accuracy — Maximum Features - The unit is fully featured with transient and wide band non-linear loading capabilities along with the additional feature of sweep capability. The PXe-DL Series Electronic Load provides high accuracy measurements (± 0.05%) of voltage and current with sweep steps as short as 20µs and pulsed loading up to 100 kHz. Units are fully configurable for loading riding and falling edge controls and soft-start capabilities. The PXe-DL Series provides excellent transient performance in timing and waveshape with the ability for the user to view the current and voltage waveforms using the internal scope. The device provides fully protected short loading with automatic current and power limiting.

Unequaled Visibility of Test Results - The PXe-DL Series provides graphical X/Y plotting of V vs I and V vs P characteristics using swept loading. In addition, the unit has a historical data logging capability, both graphical and numerical for additional test analysis and evaluation.

Flexible Integration in a Compact Package - The PXe-DL Series is just 5" high, 8.5" wide and 13" deep, allowing easy integration into any test bench. The unit provides a variety of interfaces including LAN, USB Device & Host and Digital I/O. In addition, multiple units may be used in parallel for static higher power and current loading. No other manufacturer offers more features than PX Electronics — at a price that easily fits in your budget.

PXe-DL Series Electronic DC Load Models

PXe-DL115: 150V/21A/125W DC Load with 3.6kW/32A transient capacity 150V/42A/250W DC Load with 7.25kW/65A PXe-DL215 transient capacity 150V/84A/500W DC Load with PXe-DL515: 14.5kW/130A transient capacity 500V/21A/500W DC PXe-DL150: Load with 2.4kW/32A transient capacity 500V/42A/500W PXe-DL250: DC Load with 4.8kW/65A transient capacity PXe-DL550: 500V/84A/500W DC Load with 9.6kW/130A transient PXe-RM-DL: capacity Rack Mount Option



CONDENSED FEATURES & BENEFITS

- > Easy-to-use color touchscreen for quick setup, measurement configuration, channel selection and use.
- High Accuracy measurements (0.05%) of voltage and current within pulses or sweep steps as short as 20µs.
- Generates kW, mW or µW loading.
 >20:1 higher and >1000:1 lower loading capability range than most presently available DC loads.
- > Fully featured with transient and non-linear loading capabilities ranging from 125 to 500 watts with the additional feature of sweep capability.
- > Wide bandwidth non-linear loading modes.
- > Arbitrary loading sequence with up to 100 steps to simulate virtually any "real-world" loading.
- > High speed pulsed loading up to 100kHz.
- > Rack mount option available.

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- > Fully configurable loading rising and falling edge controls and soft-start capability.
- > Excellent transient performance in timing and waveshape with the ability for the user to view the current and voltage waveforms using the internal scope.
- > Fully protected short loading, with automated current and power timing.
- Comprehensive self-test gives assurance that all loading and measurement circuitry is properly functioning.
- > Unique graphical X/Y plotting of V vs I and V vs P characteristics using swept loading.
- Unique historical data logging capability, both graphical and numerical.
- > Fully featured with transient and non-linear loading capabilities with the additional feature of sweep capability.
- > Leading accuracy typically >10:1 better than other units at lower loading levels and >2:1 better at high loading levels, with ISO17025 traceability also available.

- > Displayed Results Include:
 - 'Real-time' results numerically represented measured actual applied voltage and actual loading current, and the computed load power and resistance or conductance.
 - Pulse results numerically represented measured actual applied voltage and actual loading current within a pulse, and the computed load power and resistance or conductance.
 - OCP or OPP result numerically represented maximum current and power achieved prior to the voltage dropping below a set voltage.
 - Battery test numerically represented accumulated A.Hr and W.Hr, as accumulated since the operation was started with automatic stop at ending voltage.
 - Historical data logging graphically represented measured actual applied voltage and the actual loading current and the computed load power with down to 1ms resolution and a long-term maximum.
 - Oscilloscope graphically represented up to 400kSPS sampled applied voltage and loading current.
 - XY Plot graphically represented V vs A/W plot of swept measurement results.

For complete specifications visit www.pxelectronic.com. PXe-DL SERIES ORDERING INFORMATION

PART #	DESCRIPTION
PXe-DL115	150V/21A/125W DC Load with 3.6kW/32A transient capacity
PXe-DL215	150V/42A/250W DC Load with 7.25kW/65A transient capacity
PXe-DL515	150V/84A/500W DC Load with 14.5kW/130A transient capacity
PXe-DL150	500V/21A/500W DC Load with 2.4kW/32A transient capacity
PXe-DL250	500V/42A/500W DC Load with 4.8kW/65A transient capacity
PXe-DL550	500V/84A/500W DC Load with 9.6kW/130A transient capacity
PXe-RM-DL	Rack Mount Option

Technical Specifications

PXe-DL Series

Highly Accurate, Fully Configurable Electronic DC Load

		PXe-DL115	PXe-DL150	PXe-DL215	PXe-DL250	PXe-DL515	PXe-DL550	
VOLTAGE								
Input Volt	age	0-150V	0-500V	0-150V	0-500V	0-150V	0-500V	
Voltage Measurement Accuracy		0.04%+1mV						
Voltage (CV) L	oading	Full range of voltages, user configurable resistance from $1m\Omega$ upwards						
CV Loading Accuracy		0.04%+1mV						
Sense Loa	ding	Nominally 923k Ω , automatically included in all measurement results and all loading except open						
			C	URRENT				
Min. Curr		10µA	60µA	20µA	120µA	50µA	250µA	
	>1s	21A		42A		84A		
Max. Current	100ms	30A		60A		120A		
	<10ms)A	-	0A		0A	
Current (CC) A	ccuracy	0.05%+5µA	0.05%+30µA	0.05%+10µA	0.05%+60µA	0.05%+25µA	0.05%+125µA	
				POWER		1		
	>1s	125W		250W		500W		
Max. Power	100ms	160W			20W		0W	
	10ms 1ms	380W 1.15kW	325W 950W	760W 2.3kW	650W 1.9kW	1.5kW 4.6kW	1.3kW 3.8kW	
	<100µs	3.6kW	2.4kW	7.2kW	4.8kW	14.4kW	9.6kW	
Power (CW) A		0.075%+25µW	0.075%+150µW	0.075%+50µW	0.075%+300µW	0.075%+125µW	0.075%+625µV	
				SISTANCE			0.01070 0200	
Resistive Lo	ading	42mΩ-900kΩ	90mΩ-900kΩ	21mΩ-700kΩ	45mΩ-700kΩ	10.5mΩ-500kΩ	25mΩ-500kΩ	
Resistive (CR)					.1%			
Capacitive Lo					3µF			
			LOADING I	MODES and TIM	ING			
Loading Modes (Level A and Level B)		Open or Short Basic (CV+CR+CC+CW in any combination), single or arbitrary sequence (up to 100 independent steps) V-I Table Lookup (interpolated, up to 100 points) Linear or logarithmic swept current or power, up to 500 steps, P1->P2 or P1->P2->P1 OCP or OPP Test (automatically terminated current or power sweep)						
Loading Timing	g Modes	Continuous Level A or B (any combination of the above modes) Pulsed A/B (any combination of the above modes except OCP or OPP) Interleaved A/B (any combination of the above modes except OCP or OPP)						
Load Tim			Co	ontinuous, or 5µs to	10000s pulsed/stepp	bed		
Non-linear Lo Bandwid		Typically >35kHz with ability to reduce bandwidth						

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Size:	5in high x 8.5in wide x 13in deep
Weight:	Approx. 8lb (unpacked, without external power supply).
Power:	External 12Vdc, 60VA power brick
Display:	5in diagonal, 800x480 pixel color LCD with touchscreen.
Adjustment Wheel:	Indented encoder provided on front panel allowing for the "live" adjustment of the
	loading levels or timings.
Rack Mounting:	Rack mounts kits available for mounting one or two units in a 19in wide rack.
Terminals:	Front: Sheathed banana 4mm sockets, suitable for up to 30A continuous loading.
	Rear: Approx. 1in square x 0.06in blade type terminals (fully specified). Safety cover provided.
	Voltage Sense: wire entry sprung sockets in rear panel
Environmental	
Warm Up Time:	20 seconds
Full Specifications:	15 minutes
Temperature:	Operating: 0 to +40C, at 10 to 80%RH (non-condensing)
	Automatically reduces loading if overheating detected.
Storage:	-20C to +70C, at 5 to 95%RH (non-condensing)
Altitude:	0 to 2000m ASL
Cooling:	Variable speed forced air. Intake vents on both sides and in the bottom, exhaust vents in the rear.
-	Specifications valid with any one set of intake vents impeded. At least 6 inches of clear space must be provided
	behind the rear panel and two inches on the side of intake vents.



PX Electronics

Unit 13B, Southview Park Marsack Street Reading RG4 5AF United Kingdom

Email: info@pxelectronic.com Tel: +44 1283 684066



