



XT9812 Series LED Electronic Load for LED Power Driver Test

XT9812 DC Electronic Load is a new generation product from XiTRON. The XT9812 is designed for LED driver or DC Power Supply applications. There is a special circuit that has been designed primarily for the LED driver. The design utilizes high-performance semiconductors that are high speed and high accuracy, with resolutions of 0.1 mV and 0.01 mA (the basic accuracy is 0.03%, the basic current rise speed is 2.5 A/us). The XT9812 has wide applications from production line settings to the engineering bench. Target markets include the following type of manufacturers and markets; LED driver, cell phone charger, cell phone battery, electronic vehicle battery, switching power supply and linear power supply manufacturers, research institutes, automotive electronics, aeronautics and astronautics, solar cells and fuel cell markets.

XiTRON Technologies, founded in 1990, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing. XiTRON's sophisticated technology provides companies the edge in design verification and product manufacturability. XiTRON is ISO9001-2008 certified.

XT9812 LED Electronic Load Features

- » Six high speed operating modes: 1. Constant Current (CC); 2. Constant Resistance (CR); 3. Constant Voltage (CV); 4. Constant Wattage (CW); 5. Constant Current (CC) + Constant Voltage (CV); and 6. Constant Resistance (CR)+ Constant Wattage (CW)
- » LED mode supports LED power driver test, provides steady reading, and capacitance sensitive driver compatible
- » Over current, over voltage, over power, over heating and reversed polarity protection
- » High-luminance VFD screen
- » Intelligent fan system that is automatically activated based on temperature changes
- » Soft-start time setting runs the power supply according to the pre-set voltage value
- » Battery and short-circuit testing functions
- » Capable of dynamic testing with rising edge and falling edge settings
- » Supports external trigger of input and output
- » External current waveform monitor terminal
- » Supports remote voltage compensation and multi data storage
- » Power-on-self-test, software calibration ready, and standard rack mountable
- » Arbitrary waveform editing
- » USB interface



XiTRON XVIEW Software

While all XiTRON precision test equipment is designed to be used in a completely stand-alone manner, there are times when external tools can aid or enhance the operation of an instrument. XView software tools and drivers are designed to help easily configure an instrument from a single screen, or are used to view a complete set of measurements in a single screen. Other XView tools are designed for data collection where results can be recorded in an Excel-compatible file for post-processing, insertion into reports, or simply for archival purposes.

These precompiled applications can be downloaded from the XiTRON web site at www.xitrontech.com/support.html. Often, XiTRON can provide the source code for a particular application, and it can be used as a convenient 'starting point' for a custom software application.

MODEL	XT9812 / XT9812B		
INPUT RATING	Power	300W	
	Current	0-30A or 0-15A(B)	
	Voltage	0-150V or 0-500V(B)	
CC MODE	Range	0-3A	0-30A or 0-15A(B)
	Resolution	0.1mA	1mA
	Accuracy	0.03% + 0.05%FS	0.03% + 0.05%FS
CV MODE	Range	0.1 - 19.999V	0.1-150V
	Resolution	1mV	10mV
	Accuracy	0.03%+0.02%FS	0.03%+0.02%FS or 0.05%(B)
CR MODE (Input Current \geq 10%FS) (Input Voltage \geq 10%FS)	Range	0.03 Ω -10k Ω	0.03 Ω -5k Ω
	Resolution	16 digit	16 digit
	Accuracy	0.1%+0.1%FS	0.1%+0.1%FS
CW MODE (Input Current \geq 10%FS) (Input Voltage \geq 10%FS)	Range	0-300W	0-300W
	Resolution	1mW	10mW
	Accuracy	0.1%+0.1%FS	0.1%+0.1%FS
V MEASUREMENT	Voltage	0-19.999V	0-150V or 0-500V(B)
	Resolution	1mV	10mV
	Accuracy	0.015%+0.03%FS	0.015%+0.03%FS
I MEASUREMENT	Current	0-3A	0-30A or 0-15A(B)
	Resolution	0.01mA	0.1mA
	Accuracy	0.03%+0.05%FS	0.03%+0.08%FS
W MEASUREMENT (Input Current \geq 10%FS) (Input Voltage \geq 10%FS)	Power	100W	300W
	Resolution	1mW	10mW
	Accuracy	0.1%+0.1%FS	0.1%+0.1%FS
BATTERY MEASUREMENT	Battery Input: 0.1-150V;Max. Measurement: Capacity=999AH Resolution=0.1mA; Time Range=1S-16H		
DYNAMIC MEASUREMENT	Transition List: 0-25kHz; 2.5A/ μ S; T1&T2:60 μ S-999S; Accuracy:+15% offset+10%FS		
Current Soft- start-up time	1mS; 2mS; 5mS;10mS; 20mS; 50mS;100mS; 200mS; 500mS and 1000mS Accuracy:+15% offset+10%FS		
LED TEST	Press shift+▲ button to enter LED test. Repeat to escape the LED test. A D character shows on lower right of the display in the LED test.		
SHORT CIRCUIT	Constant Current (CC)	\approx 3.3A	\approx 33A or 18A(B)
	Constant Voltage (CV)	0V	
	Constant Resistance (CR)	\approx 28m Ω or 200m Ω (B)	
TEMPERATURE	Operating	0~40 $^{\circ}$ C	
	Storage	-10 $^{\circ}$ C ~ 70 $^{\circ}$ C	
WEIGHT	Lbs/Kgs	7.7 lbs/3.5kgs	
OPERATING POWER SUPPLY	100V/200V, 60Hz/50Hz Manual Switch		