

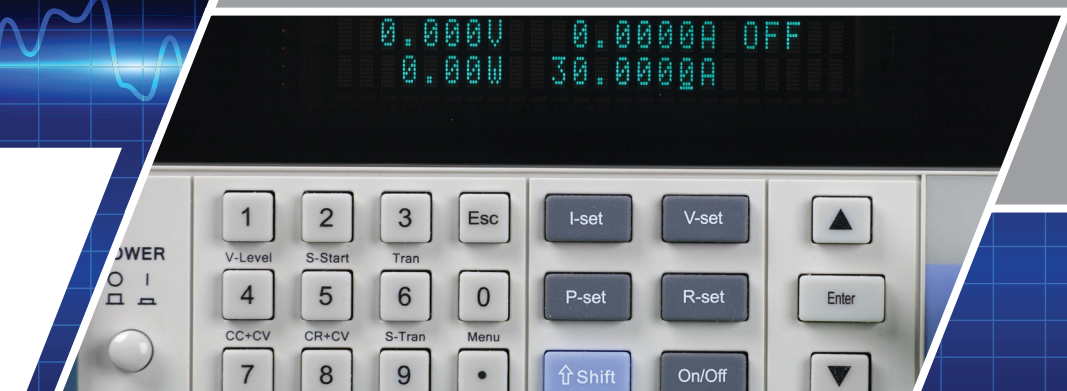
XT9812 Series

Programmable Electronic DC Loads

XT9812 DC Electronic Load
is a new generation product
from Vitrek. The XT9812 is
designed for LED driver or
DC Power Supply applications.

Quality and Reliability

Vitrek, founded in 1990, is the premier source of precision power testing and measuring equipment for industrial and consumer product development and manufacturing. Vitrek's sophisticated technology provides companies the edge in design verification and product manufacturability. Vitrek is ISO 17025 Accredited.



There is a special circuit that has been designed primarily for the LED driver. The design utilizes high performance semiconductors with high speed and high accuracy, and 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.

- > 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



While all Vitrek 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 Vitrek web site at www.vitrek.com. Often, Vitrek can provide the source code for a particular application, and it can be used as a convenient 'starting point' for a custom software application.

INDUSTRIES SERVED

- Lighting Consumer Products • Medical • Automotive • Regulatory Agencies
- Process Control • Power Supply • Battery • Alternative Energy • Military • Aerospace

25
Years Industry
EXPERTISE

XT9812 Series

Programmable Electronic DC Loads

Test Like You
MEAN IT



ORDERING INFORMATION

ITEM#	DESCRIPTION
822- XT9182	Programmable DC Electronic Load; 300W, 150V, 30A
822- XT9182B	Programmable DC Electronic Load; 300W, 500V, 15A

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
	Resolution	0.1mA
	Accuracy	0.03% + 0.05%FS
CV MODE	Range	0.1 - 19.999V
	Resolution	1mV
	Accuracy	0.03% + 0.02%FS
CR MODE (Input Current $\geq 10\%$ FS) (Input Voltage $\geq 10\%$ FS)	Range	0.03 Ω -10k Ω
	Resolution	16 digit
	Accuracy	0.1%+0.1%FS
CW MODE (Input Current $\geq 10\%$ FS) (Input Voltage $\geq 10\%$ FS)	Range	0-300W
	Resolution	1mW
	Accuracy	0.1%+0.1%FS
V MEASUREMENT	Voltage	0-19.999V
	Resolution	1mV
	Accuracy	0.015%+0.03%FS
I MEASUREMENT	Current	0-3A
	Resolution	0.01mA
	Accuracy	0.03%+0.05%FS
W MEASUREMENT (Input Current $\geq 10\%$ FS) (Input Voltage $\geq 10\%$ FS)	Power	100W
	Resolution	1mW
	Accuracy	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)	$\approx 3.3A$
	Constant Voltage (CV)	0V
	Constant Resistance (CR)	$\approx 28m\Omega$ or 200m Ω (B)
TEMPERATURE	Operating	0-40°C
	Storage	-10°C ~ 70°C
WEIGHT	Lbs/Kgs	7.7 lbs/3.5kgs
OPERATING POWER SUPPLY	100V/200V, 60Hz/50Hz Manual Switch	



Vitrek
12169 Kirkham Road
Poway, CA 92164
(858) 689-2755
info@vitrek.com
www.vitrek.com

PM-074 Rev 1/19



Please visit www.vitrek.com for ordering information.