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Your Power Test Solution

IT8800 Multi-function wide range electronic load

IT8800 programmable high-accuracy electronic load has especial LED mode which supports LED power drive test and programmable interface specifications. To simulate LED current. The power of single channel can meet your various needs, which ranges from 150W to 55KW and the highest power is 600KW,it also has OVP/OCP/OPP/OTP.IT8800 is with the resolution of voltage and current is 0.1mv and 0.01ma , adjustable current rising speed,0.0001A/us-2.5A/us adjustable space. CC/CV/CR/CP dynamic working mode, the highest testing speed of current and voltage is 50KHZ,the data memory is 100 sets. It supplies external analog and built-in RS232.USB, and GPIB to make your control the instrument more conveniently by software IT7000.

IT8811

Model	Power	Voltage	Current
IT8811	150W	120V	30A
IT8812	250W	120V	30A
IT8812C	250W	120V	60A
IT8813	750W	120V	60A
IT8814	1500W	120V	120A
IT8816	3KW	120V	240A
IT8817	4500W	120V	360A
IT8818	6KW	120V	480A
IT8830	10KW	120V	500A
IT8831	15KW	120V	750A
IT8832	20KW	120V	1000A
IT8833	25KW	120V	1500A

Model	Power	Voltage	Current
IT8812B	200W	500V	15A
IT8813B	750W	500V	30A
IT8814B	1200W	500V	60A
IT8816B	2500W	500V	100A
IT8817B	3600W	500V	120A
IT8818B	5KW	500V	150A

*High power electonic load(10KW-55KW)

Model	Power	Voltage	Current
IT8830B	10KW	500V	200A
IT8831B	15KW	500V	300A
IT8832B	20KW	500V	400A
IT8833B	25KW	500V	500A
IT8834B	30KW	500V	600A
IT8835B	35KW	500V	700A
IT8836B	40KW	500V	800A
IT8837B	45KW	500V	900A
IT8838B	50KW	500V	1000A
IT8839B	55KW	500V	1100A

*Highest power of single electronic load reach 600KW; custom design is offer for especial specification.

*High power electonic load(10KW-55KW)

Model	Power	Voltage	Current
IT8830H	10KW	800V	100A
IT8831H	15KW	800V	150A
IT8832H	20KW	800V	200A
IT8833H	25KW	800V	250A
IT8834H	30KW	800V	300A
IT8835H	35KW	800V	350A
IT8836H	40KW	800V	400A
IT8837H	45KW	800V	450A
IT8838H	50KW	800V	500A
IT8839H	55KW	800V	600A

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Feature

- VFD display
- Dynamic mode: up to 25 KHz
- Measurement resolution:0.1mv,0.01ma
- OVP/OCP/OPP/OTP and reverse polarity protection
- Measurement speed: up to 50KHz
- Four operation mode:CC/CV/CW/CR
- Remote sensing
- Rotary knob, making the operation more easier
- Battery test function
- Memory capacity: 100 sets
- Adjustable current rising slope:0.001A/us~2.5A/us
- Short-circuit test function
- Dynamic test, auto-test
- With skid-resistant tripod and portable firm chassis
- Controlled by intelligent fans
- Built-in Buzzer as alarm signal
- Power off memory function
- CR-LED test
- OCP/OPP test
- Voltage rising speed test
- External analog control
- Support VISA/USBTMC/SCPI communication protocol
- Built-in RS232/USB/GPIB communication interface
- Control by computer via software IT7000

Dynamic mode: up to 25KHz

The transient test allows switching between two different load values. The function is used to test dynamic characteristic of power supply.
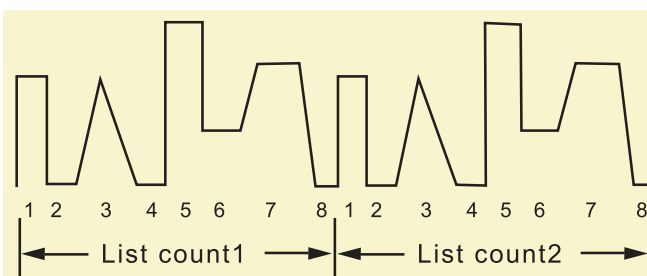
B Level

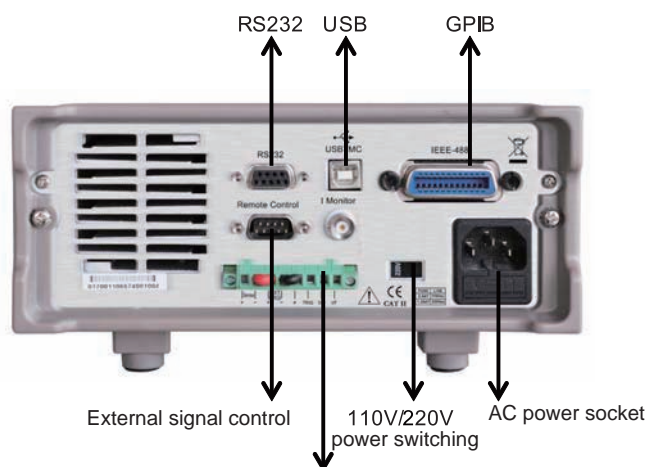A Level
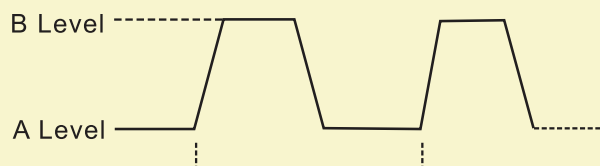
Continuous Transient Operation

Adjustable rising/falling speed of current

List mode allows you to generate a complex current sequence. Moreover, the mode change can be synchronized with an internal or external signal, to accomplish dynamic and precise test.

A list file includes following parameters: file name, step counts (range 2-84), time width of single step (0.00002s~3600s), step value and slope. The LIST function can make many kinds of complex sequences, to meet complicated test requirements. The slope range is 0.0001A/us~2.5A/us.

1 2   3   4   5   6   7   8   1   2   3   4   5   6   7   8

|← List count1 →| |← List count2 →|

List Sequence

RS232   USB   GPIB

External signal control   110V/220V power switching   AC power socket

Remote sense/external trigger/external analog control terminals

CR-LED process

Unique LED mode can provide LED power test, can be used in LED power simulation.

As we all know the LED constant power output waveform usually have large power ripple. This is because of the ripple, traditional CR mode can't simulate the actual characteristic of LED driver, its testing current and voltage will shake.

Basing on traditional CR mode, CR-LED mode adds the setting item of diode break-over voltage. Only when the input voltage is above the set value, will the DC load start to work. Thus, the IT8800 series can simulate the actual characteristic of LED.

Voltage Rising/Falling time test

IT8800 provides peculiar measure function to test voltage rising/falling time.

It can calculate the time from one voltage to another voltage. No need to use the oscilloscope. Voltage rising time is an important index of a device. So with IT8800, customer can save cost.
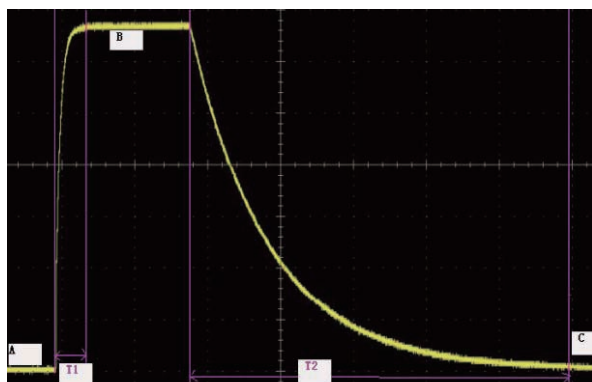
Current monitor

IT8800 series products allows the user to monitor actual current through I-monitor terminal. User could connect an oscilloscope to observe actual current. It will generate at 0-10V analog to corresponding to 0-100% rated current.

Communication function

Built-in standard RS232 /USB/GPIB communication interface, which can meet your different requirements. And the communication speed is faster than its cable telecommunication through transient device.

Auto-test function

IT8800 auto-test function can simulate many kinds of testing. It totally can edit 10 test files, and can get connection with one file and another.

Also you can chose the condition to stop the test: stop when testing pass or when testing fail. Its adjustable current speed rate of rising and falling can make auto-test simulate various kinds of test waveform.

OCP、OPP test process

OPP test process: To start a OPP test, press " shift+ trigger" to edit an OPP file.When the input voltage has reached VON point , power will begin to work after a delay time. The power value will increase by a step size at regular intervals.

Simultaneously, the DC load will judge whether the input voltage is lower than OPP voltage (you need to set). If it is ,then the present current value will be compared to see if it is in the current range you've set, in this range, the power will continue to increase within the cut-off current range. And then compare OPP voltage with input voltage too.

OCP test process:To start an OCP test, press " shift +trigger"to enter OCP editing screen.After input voltage reaches Von point, the DC load start to draw a current from the source after a delay time. The current value will increase by a certain step size at regular intervals. Simultaneously, the DC load will judge whether the input voltage is lower than OCP voltage you've set. If it is, then the present current value will be compared to see if it is in the current range you've set. Within the range, the OCP test will Pass or Fail.

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IT8800 series programmable DC load, its maximum voltage is 800V, maximum current is 1500A, and its maximum power up to 55KW.

T8811（120V/30A/150W）

T8818B（500V/150A/5000W）

T8838H（800V/500A/50KW）

Panel operation

It is very convenient to operate the IT8800 series electronic load panel, its shot-cut buttons are as follows: short circuit test, dynamic test, LIST test, data storage, data calls, battery test, auto-test, test stop, test trigger, over current test, over power test and specification can be accepted.

Parameters setting

It is quite convenient to set the parameters of IT8800 series , the users can use the panel button, to adjust pulsating knob, also can adjust the cursor around left and right keys, which to adjust stepper parameter values. This will eliminate the tedious steps of setting step.

Operating mode

The operating mode of IT8800 series electronic load has CC, CV, CW, CR, It will make you easy to simulate various characteristics of load, which can save cost greatly. It support OVP,OCP,OPP,OTP,LRV, and it can set the protection point of current, voltage, and power. In every condition, it will make auditory cues and cut off the circuit to ensure the safety during test.

Remote sense function

In CC, CV, CR and CW mode, when load connect a power supply, it will cause large voltage-drop on the connection lines between tested instrument and terminals of load. Using remote sensing, you can sense the voltage at the power supply's terminals, effectively removing the effect of the voltage drop in the connection wires.
Remote operation: SENSE(+) and SENSE(-) are remote input terminals, in order to avoid the voltage-drop because of too long wires, remote test allows testing on the input terminals to improve the test accuracy. Wire connection diagram of remote test is as follows:
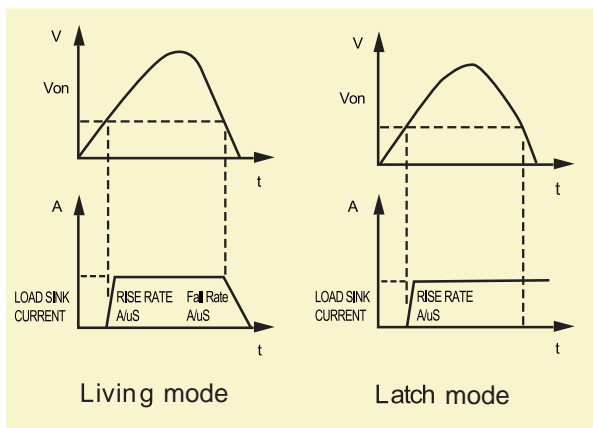
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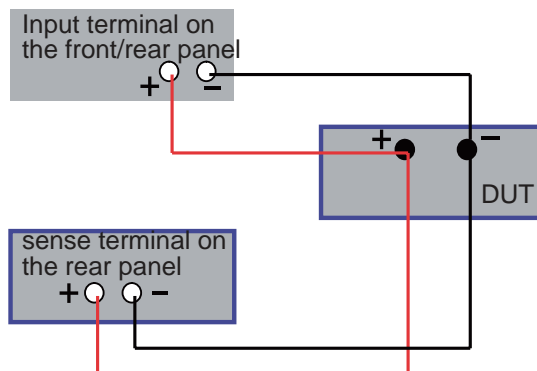
Support living and latch

IT8800 series support with load voltage setting, and it offers two kinds of load modes. Choosing Living means working following status, when choosing Latch, it means work load point latch with load status. It can meet different test requirements.


Living mode   Latch mode

IT8800 series can keep common used parameters in 100 sets non-volatile memory. It is convenient and quick to take them out.

The rear panel of IT8800 series has voltage failure indicate terminal, when load in the status of OVP or LRV, the indicate terminal of VF foot voltage failure will output high level.

IT8800 series load allows the users to control current or voltage through the external analog terminals (EXT PRG). Input a 0-10V analog to adjust 0-100% rated voltage and current.

IT8800 series products test the battery capability in CC mode. Make a program to set the stop conditions. There are three stop conditions can be chosen: stop voltage, stop capacity and stop timer. The discharge process of electronic load is terminated if the system checks the battery reaches the specified value or under an insecurity state.

In testing procedure, the battery voltage, discharge current, discharge time and discharged capability will display on the front panel.
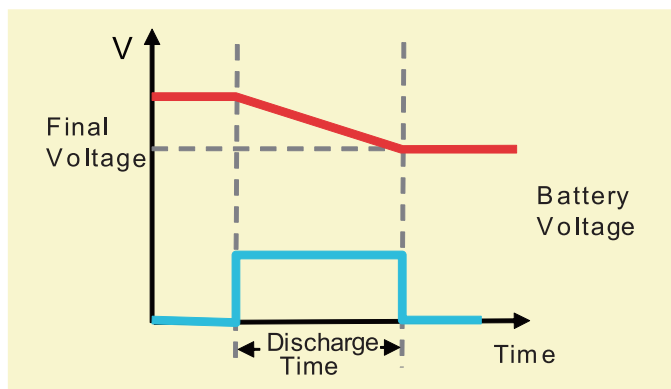
IT7000 monitoring software

IT7000 has very powerful monitor function, it can monitor many sets of load simultaneously, and display monitoring and control interface of every set on the same software. The users can click on the corresponding tags to check the monitoring and control status of corresponding instrument, which makes the test more convenient. In order to distinguish different instrument with same model, the users also can edit the name of every set, which demonstrate the humanity of software.

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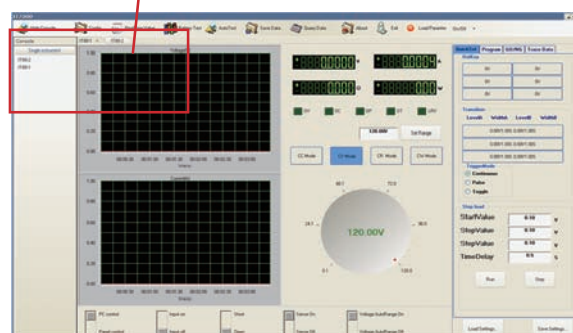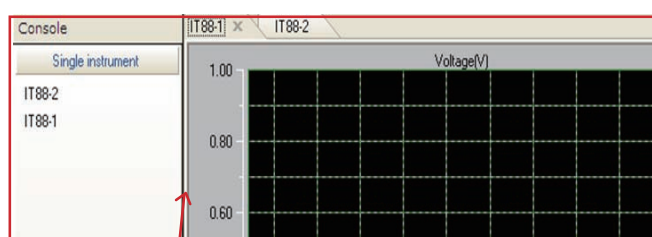
IT8811/12 Specifications

|		IT8811		IT8812		IT8812B		IT8812C	
Rated value (0~40℃)	Input voltage	0~120V		0~120V		0~500V		0~120V	
	Input current	0~3A	0~30A	0~3A	0~30A	0~3A	0~15A	0~6A	0~60A
	Input power	150 W		250W		200W		250W	
	Minimum operation voltage	0.11Vat 3A	1.1Vat 30A	0.11 Vat 3A	1.1 Vat 30A	0.45V at 3A	4.5V at 15A	0.18V/6A	1.8V/60A
CV mode	Range	0~18V	0~120V	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)
CC mode	Range	0~3A	0~30A	0~3A	0~30A	0~3A	0~15A	0~6A	0~60A
	Resolution	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA	0.1mA	1mA
	Accuracy				±(0.05%+0.05%FS)			±(0.05%+0.05%FS)	±(0.05%+0.1%FS)
CR mode	Range	0.05Ω~10Ω	10Ω~7.5KΩ	0.05Ω~10Ω	10Ω~7.5KΩ	0.3Ω~10Ω	10Ω~7.5KΩ	0.05Ω~10Ω	10Ω~7.5KΩ
	Resolution				16bit				
	Accuracy	0.01% + 0.08S	0.01% + 0.0008S	0.01% + 0.08S	0.01% + 0.0008S	0.01% + 0.08S	0.01% + 0.0008S	0.01% + 0.08S	0.01% + 0.0008S
CW mode	Range	150W		250W		200W		250W	
	Resolution				10mW				
	Accuracy	0.1% +0.1% FS		0.1% +0.1% FS		0.1% +0.1% FS		0.2% +0.2% FS	
				Dynamic mode					
		CC		CC		CC		CC	
Dynamic mode	T1 & T2			20uS~3600S /Res:1uS					
	Accuracy			5uS±100ppm					
	Rising/decending slope	0.0001~0.25A/uS	0.001~2.5A/uS	0.0001~0.25A/uS	0.001~2.5A/uS	0.0001~0.1A/uS	0.001~ 1A/uS	0.0001~0.25A/uS	0.001~2.5A/uS
				Measuring range					
Readback voltage	Range	0~18V	0~120V	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V
	Resolution	0.1mV	1mV	0.1mV	1mV	1mV	10mV	0.1mV	1mV
	Accuracy				±(0.025%+0.025%FS)				
Readback current	Range	0~3A	0~30A	0~3A	0~30A	0~3A	0~15A	0~6A	0~60A
	Resolution	0.01mA	0.1mA	0.01mA	0.1mA	0.01mA	0.1mA	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.1%FS)	
Readback power	Range	150W		250W		200W		250W	
	Resolution				10mW				
	Accuracy	±(0.1%+0.1%FS)		±(0.1%+0.1%FS)		±(0.1%+0.1%FS)		±(0.2%+0.2%FS)	
				Protection range					
OPP		≒160W		≒260W		≒210W		≒260W	
OCP		≒3.3A	≒33A	≒3.3A	≒33A	≒3.3A	≒6.5A	≒6.6A	≒66A
OVP		≒130V		≒130V		≒530V		≒130V	
OTP				≒85℃					
				Specification					
Short circuit	(CC)	≒3.3/3A	≒33/30A	≒3.3/3A	≒33/30A	≒3.3/3A	≒16.5/15A	≒6.6A	≒66A
	(CV)			0V					
	(CR)	≒35mΩ		≒35mΩ		≒300mΩ		≒30mΩ	
Input impedance		300KΩ		300KΩ		1MΩ		300KΩ	
Dimension				214.5mm* 88.2mm* 354.6mm					

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8811/12 Electronic load installation diagram (1/2 2U,150W~300W)
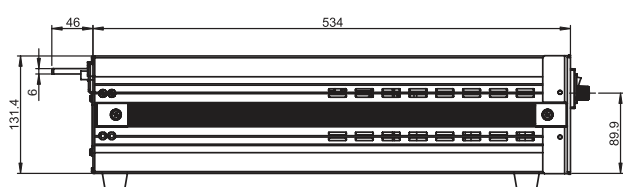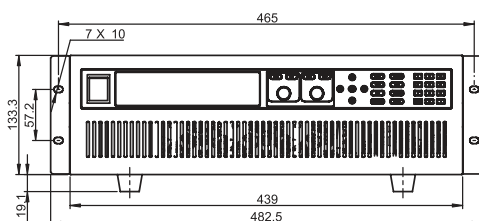
Linear Measure:mm

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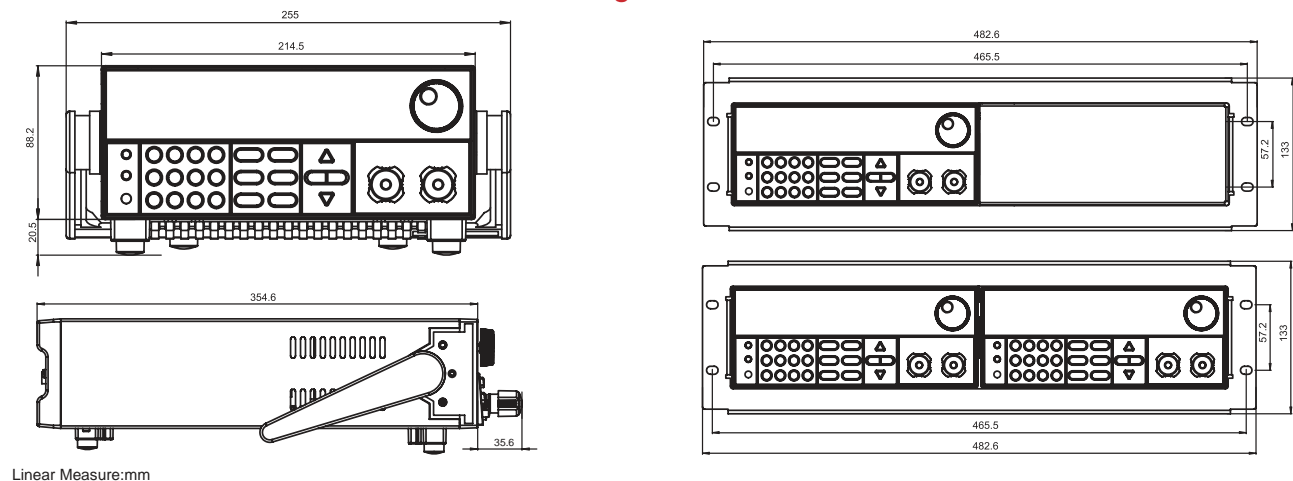
IT8813/14 Specifications

		IT8813		IT8813B		IT8814		IT8814B	
Rated value (0~40℃)	Input voltage	0~120V		0~500V		0~120V		0~500V	
	Input current	0~6A	0~60A	0~3A	0~30A	0~12A	0~120A	0~6A	0~60A
	Input power	750 W		750W		1500W		1200W	
	Minimum operation voltage	0.1V at 6A	1.0V at 60A	0.36V/6A	3.6V/60A	0.12V at 12A	1.2V at 120A	0.36V/6A	3.6V/60A
CV mode	Range	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)
CC mode	Range	0~6A	0~60A	0~3A	0~30A	0~12A	0~120A	0~6A	0~60A
	Resolution	0.1mA	1mA	0.1mA	1mA	1mA	10mA	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)							
CR mode	Range	0.02Ω~10Ω	10Ω~7.5KΩ	0.15Ω~10Ω	10Ω~7.5KΩ	0.01Ω~10Ω	10Ω~7.5KΩ	0.1Ω~10Ω	10Ω~7.5KΩ
	Resolution	16bit							
	Accuracy	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
CW mode	Range	750W		750W		1500W		1200W	
	Resolution	10mW		10mW		100mW		100mW	
	Accuracy	0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS	
Dynamic mode									
		CC		CC		CC		CC	
Dynamic mode	T1&T2	20uS~3600S /Res:1uS							
	Accuracy	5uS±100ppm							
	Rising/decending slope	0.0001~0.25A/uS	0.001~2.5A/uS	0.0001~0.1A/uS	0.001~1A/uS	0.001~0.25A/uS	0.01~2.5A/uS	0.0001~0.1A/uS	0.001~1A/uS
Measuring range									
Readback voltage	Range	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Resolution	0.1mV	1mV	1mV	10mV	0.1mV	1mV	1mV	10mV
	Accuracy	±(0.025%+0.025%FS)							
Readback current	Range	0~6A	0~60A	0~3A	0~30A	0~12A	0~120A	0~6A	0~60A
	Resolution	0.1mA	1mA	0.1mA	1mA	1mA	10mA	0.1mA	1mA
	Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)	
Readback power	Range	750W		750W		1500W		1200W	
	Resolution	10mW		10mW		100mW		100mW	
	Accuracy	±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)	
Protection range									
OPP		≒760W		≒760W		≒1550W		≒1250W	
OCP		≒6.6A	≒66A	≒3.3A	≒33A	≒13.2A	≒132A	≒6.6A	≒66A
OVP		≒130V		≒530V		≒130V		≒530V	
OTP		≒85℃							
Specification									
Short circuit	(CC)	≒6.6/6A	≒66/60A	≒3.3/3A	≒33/30A	≒13.2A	≒132A	≒6.6A	≒66A
	(CV)	0V							
	(CR)	≒15mΩ	≒15mΩ	≒120mΩ	≒120mΩ	≒10mΩ	≒10mΩ	≒60mΩ	≒60mΩ
Input impedance		300KΩ		1MΩ		300KΩ		1MΩ	
Dimension		439mm*133.3mm* 580mm							

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8813/14/16 Electronic load installation diagram (3U,750W~3000W)

Linear Measure:mm
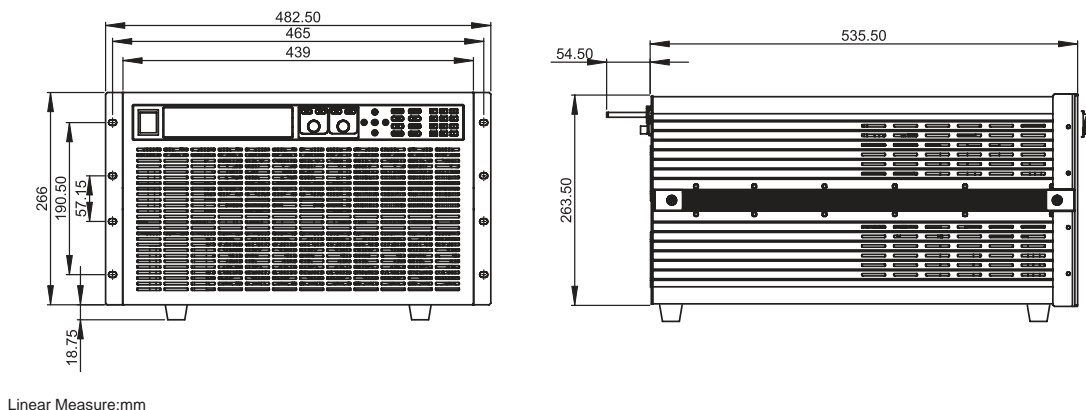
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IT8816/17 Specifications

Rated value	Input voltage	IT8816		IT8816B		IT8817		IT8817B	
(0~40℃)	Input current	0~120V		0~500V		0~120V		0~500V	
	Input power	0~24A	0~240A	0~10A	0~100A	0~36A	0~360A	0~12A	0~120A
	Minimum operation voltage	3000 W		2.5KW		4500W		3.6KW	
CV mode	Range	0.12V at 24A	1.2V at 240A	0.3V at 10A	3V at 100A	0.15V at 36A	1.5V at 360A	0.3V/12A	3V/120A
	Resolution	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
		±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)
CC mode	Range	0~24A	0~240A	0~10A	0~100A	0~36A	0~360A	0~12A	0~120A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.1%FS)		±(0.05%+0.05%FS)	
CR mode	Range	0.01Ω~10Ω	10Ω~7.5KΩ	0.03Ω~10Ω	10Ω~7.5KΩ	0.01Ω~10Ω	10Ω~7.5KΩ	0.03Ω~10Ω	10Ω~7.5KΩ
	Resolution	16bit							
	Accuracy	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
CW mode	Range	3000W		2.5KW		4500W		3.6KW	
	Resolution	100mW							
	Accuracy	0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS	
		Dynamic mode							
Dynamic mode	T1 & T2	CC		CC		CC		CC	
	Accuracy	20uS~3600S /Res:1uS							
	Rising/decending slope	5uS±100ppm							
		0.001~0.25A/uS	0.01~2.5A/uS	0.001~0.1A/uS	0.01~1A/uS	0.001~0.25A/uS	0.01~2.5A/uS	0.001~0.1A/uS	0.01~1A/uS
Readback voltage	Range	**Measuring range**							
	Resolution	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
Readback current	Range	±(0.025%+0.025%FS)							
	Resolution	0~24A	0~240A	0~10A	0~100A	0~36A	0~360A	0~12A	0~120A
	Accuracy	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
Readback power	Range	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)	
	Resolution	3000W		2.5KW		4500W		3.6KW	
	Accuracy	100mW							
OPP		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)	
OCP		**Protection range**							
OVP		≒3050W		≒2550W		≒4550W		≒3650W	
OTP		≒26.4A	≒264A	≒11A	≒110A	≒39.6A	≒396A	≒13.2A	≒132A
		≒130V		≒530V		≒130V		≒530V	
Short circuit	(CC)	≒85℃							
	(CV)	**Specification**							
	(CR)	≒26.4/24A	≒264/240A	≒11A	≒110A	≒39.6A	≒396A	≒13.2A	≒132A
Input impedance		0V							
Dimension		≒5mΩ	≒5mΩ	≒30mΩ	≒30mΩ	≒4mΩ	≒4mΩ	≒25mΩ	≒25mΩ
		300KΩ		1MΩ		300KΩ		1MΩ	
		439mm*133.3mm*580mm				439mm*590mm*266mm			

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

### IT8817 Electronic load installation diagram（6U，3.6KW~4.5KW）

482.50
465
439
266
190.50
57.15
18.75
54.50
535.50
263.50

Linear Measure:mm

IT8818 Specifications

Rated value	Input voltage	IT8818		IT8818 B	
(0~40℃)	Input current	0~120V		0~500V	
	Input power	0~48A	0~480A	0~15A	0~150A
	Minimum operation voltage	6KW		5KW	
	Range	0.15V at 48A	1.5V at 480A	0.3V at 15A	3V at 150A
CV mode	Resolution	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV
		±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)
	Range				
CC mode	Resolution	0~48A	0~480A	0~15A	0~150A
	Accuracy	1mA	10mA	1mA	10mA
	Range	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)	
CR mode	Resolution	0.005Ω~10Ω	10Ω~7.5KΩ	0.03Ω~10Ω	10Ω~7.5KΩ
	Accuracy			16bit	
	Range	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
CW mode	Resolution	6KW		5KW	
	Accuracy	100mW		100mW	
		0.2%+0.2%FS		0.2%+0.2%FS	
			Dynamic mode		
Dynamic mode	T1&T2	CC		CC	
	Accuracy	20uS~3600S /Res:1uS			
	Rising/decending slope	5uS±100ppm			
		0.001~0.25A/uS	0.01~2.5A/uS	0.001~0.1A/uS	0.01~1A/uS
Readback voltage	Range		Measuring range		
	Resolution	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV
	Range		±(0.025%+0.025%FS)		
Readback current	Resolution	0~48A	0~480A	0~15A	0~150A
	Accuracy	1mA	10mA	1mA	10mA
	Range	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)	
Readback power	Resolution	6KW		5KW	
	Accuracy	100mW		100mW	
		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)	
OPP			Protection range		
OCP		≒6050W		≒5050W	
OVP		≒52.8A	≒528A	≒16.5A	≒165A
OTP		≒130V		≒530V	
			≒85℃		
Short circuit	(CC)		Specification		
	(CV)	≒52.8A	≒528A	≒16.5A	≒165A
	(CR)		0V		
Input impedance		≒3mΩ	≒3mΩ	≒20mΩ	≒20mΩ
Dimension		300KΩ		1MΩ	
			439mm*266mm*590mm		

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8818 Electronic load installation diagram (6U,5KW~6KW)

Linear Measure:mm

18 IT8800 Electronic Load

ITECH ELECTRONICS
Your Power Test Solution
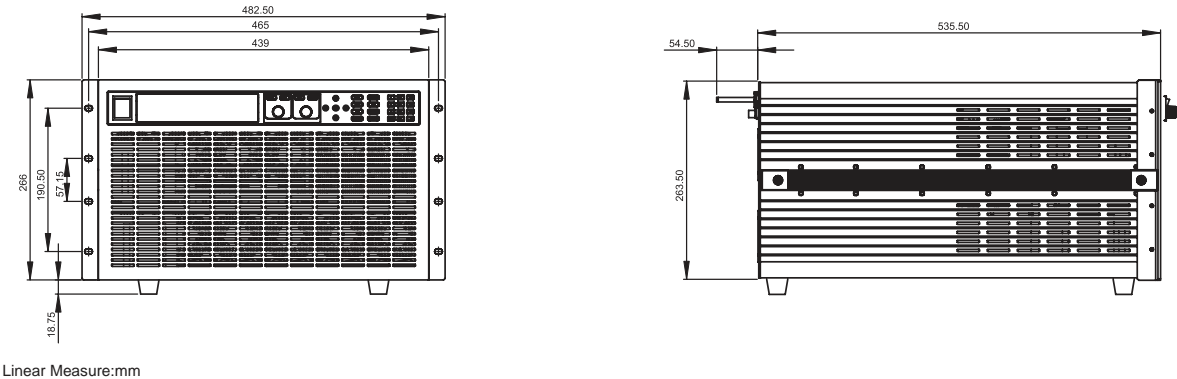
IT8830 Specifications

		IT8830		IT8830B		IT8830H	
Rated value	Input voltage	0~120V		0~500V		0~800V	
(0~40℃)	Input current	0~50A	0~500A	0~20A	0~200A	0~10A	0~100A
	Input power	10KW		10KW		10KW	
	Minimum operation voltage	0.1V at 50A	1V at 500A	0.3V at 20A	3V at 200A	0.3V at 10A	3V at 100A
CV mode	Range	0~18V	0~120V	0~50V	0~500V	0~80V	0~800V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)
CC mode	Range	0~50A	0~500A	0~20A	0~200A	0~10A	0~100A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)			
CR mode	Range	0.005Ω~10Ω	10Ω~7.5KΩ	0.02Ω~10Ω	10Ω~7.5KΩ	0.05Ω~10Ω	10Ω~7.5KΩ
	Resolution	16bit					
	Accuracy	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
CW mode	Range	10KW					
	Resolution	1W					
	Accuracy	0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS	
		Measuring range					
Readback voltage	Range	0~18V	0~120V	0~50V	0~500V	0~80V	0~800V
	Resolution	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.025%+0.025%FS)					
Readback current	Range	0~50A	0~500A	0~20A	0~200A	0~10A	0~100A
	Resolution	1mA	10mA	1mA	10mA	1mA	10mA
	Accuracy	±(0.05%+0.05%FS)		±(0.05%+0.05%FS)		±(0.05%+0.05%FS)	
Readback power	Range	10KW		10KW		10KW	
	Resolution	1W					
	Accuracy	±(0.2%+0.2%FS)		±(0.2%+0 2%FS)		±(0.2%+0.2%FS)	
		Protection range					
OPP		≒10.1KW					
OCP		≒55A	≒550A	≒22A	≒220A	≒11A	≒110A
OVP		≒130V		≒530V		≒850V	
OTP		≒85℃					
		Specification					
Short circuit	(CC)	≒55A	≒550A	≒22A	≒220A	≒11A	≒110A
	(CV)	0V					
	(CR)	≒2mΩ		≒15mΩ		≒30mΩ	
Input impedance		300KΩ		1MΩ		2MΩ	
Dimension		12 U		12 U		12 U	

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS

IT8830 Electronic load installation diagram (12U,10KW)

Linear Measure:mm