

Medium Power Programmable DC electronic load

FT63200A/E SERIES



Description

The FT63200A/E series of Medium power programmable DC electronic load is designed for high reliability and high power density. It can achieve 2U/3kW, which is twice of the power density of the conventional load.

The FT63200A/E series has three voltage ranges of 150V, 600V and 1200V, with a single power range from 750W to 3kW. Its wider working range, extremely fast dynamic frequency, effectively increase the testing capability and application range. The whole series of products have strong overload capacity, instant over power pull up to twice the rated power, can effectively reduce the test cost.

FT63200A/E is equipped with LAN, RS485, CAN, USB and other communication interfaces as well as analog interfaces. It supports SCPI, Modbus and CANopen communication protocols, which provides great convenience for system integration and application.

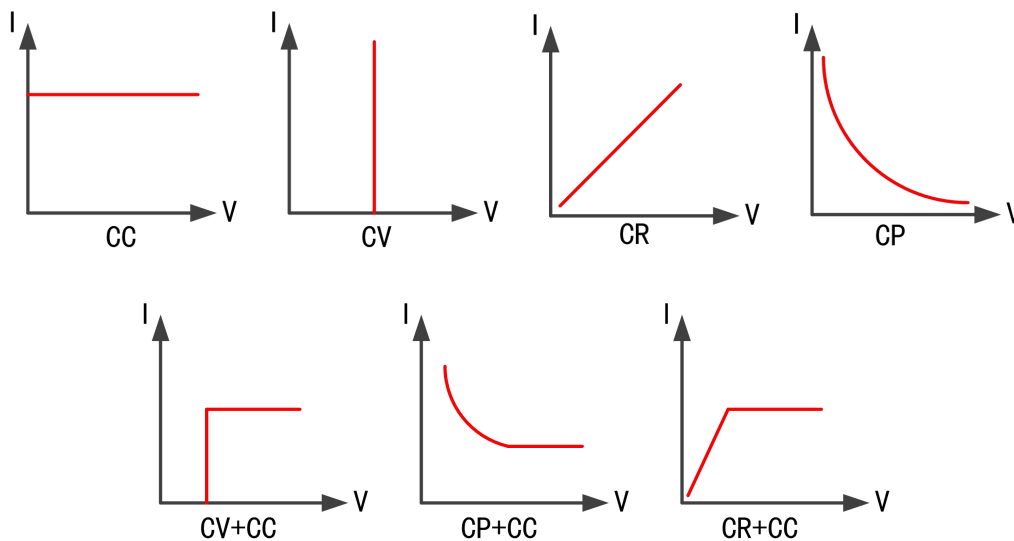
Features :

- High power density design, the whole machine can achieve 3kW/2U;
- Single power: 750W ~ 3000W, the maximum power can be extended to 30kW through the master/slave parallel
- Voltage level: 150V, 600V, 1200V;
- high precision, voltage precision : $(0.025\%+0.025\%F.S.)$;
current accuracy : $(0.05\%+0.05\%F.S.)$;
- Multiple working modes: CC、CV、CR、CP、CRD、CPD、CV+CC、CR+CC、CP+CC operation mode;
- sampling rate 500kHz;
- 30kHz dynamic scanning function ;
- The remote data transmission rate can reach 1kHz, which can greatly improve the data acquisition ability of communication interface.
- Instantaneous over power carrying function, instant carrying capacity can reach twice of the rated power;
- OCP, OPP, LED simulation, load effect, battery internal resistance, battery discharge test function;
- Time measurement, (Vpk+/-) measurement function;
- Automatic test function, sine wave load function, sequence function;
- Comprehensive protection function: over voltage, over current, over temperature, current limit, power limit, input reverse connection, power off memory, etc.
- External analog programming input and current monitoring output, with high voltage isolation capability;

- TFT color LCD screen, English and Chinese menu interface;
- Equipped with a variety of communication interfaces: RS485, LAN, USB, CAN (optional);
- Supports SCPI and ModBus communication protocols

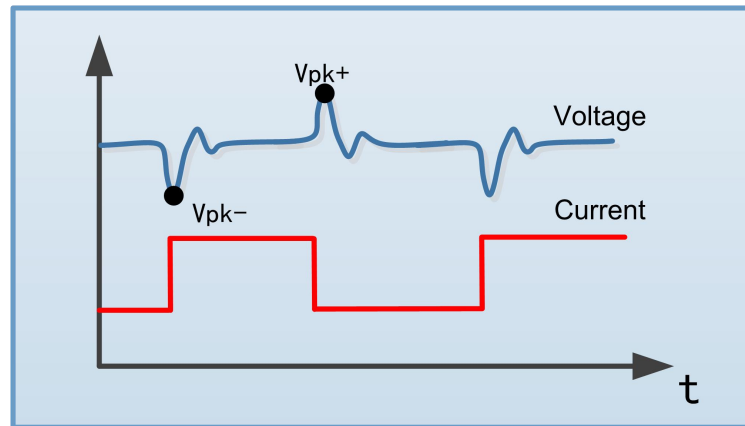
Multiple modes of operation

FT63200A/E series has four basic operating modes including: constant current, constant voltage, constant resistance and constant power, which can meet a wide range of testing requirements. At the same time, it also has the function of CV+CC, CR+CC, CP+CC composite operation mode. Users can set the current limit value according to their own testing requirements to avoid overcurrent damage to the test product in the process of testing. Among them, CV+CC mode can be applied to simulate battery charging characteristics, test charging pile, vehicle charger and other similar products. CR+CC mode can simulate power supply voltage current limit and accuracy test.



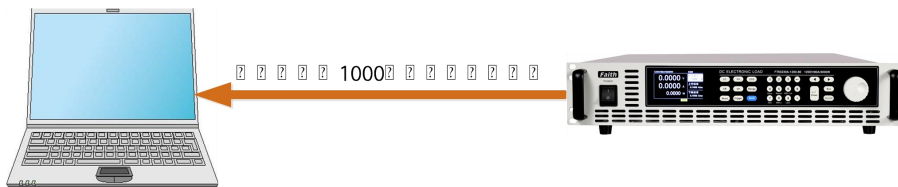
30kHz Dynamic sweep frequency, Vpk+/-capture

The FT63200A / E series has a dynamic sweep function and a maximum frequency of 30 kHz. During the test, capture and record the peak voltage V_{pk+} , the valley voltage V_{pk-} and the occurrence frequency point. It can effectively test the dynamic response of all kinds of power supply at different frequencies.



1kHz data transmission

The FT63200A / E series can provide users with a data transmission capacity of up to 1 kHz, that is, 1,000 voltage and current data points per second, so as to realize the functions such as waveform drawing and dynamic data analysis. In the system integration application, the upper computer can avoid the oscilloscope and high-speed current acquisition hardware, directly obtain a large amount of test data, and reduce the cost.

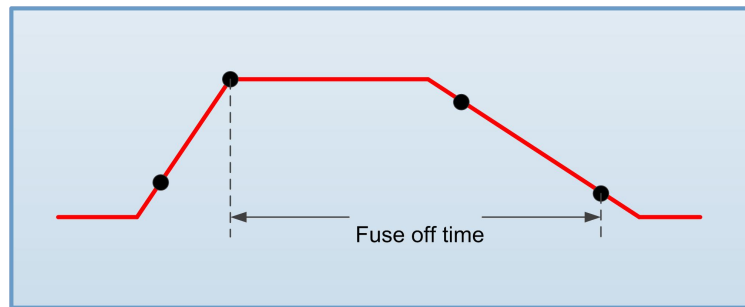


Transient overpower loading function

FT63200A / E series electronic load has instantaneous more than 2 times more than the rated power pull load capacity. In the instantaneous high-power pull load test, such as the starting characteristics of power supply, instantaneous high rate discharge characteristics of power battery, and instantaneous load capacity of power electronic devices, it can greatly save the cost.

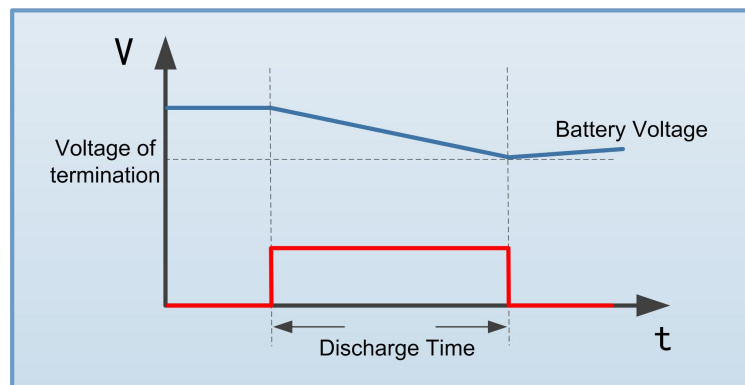
Time measurement

The FT63200A / E series electronic load has a time measurement function. By capturing the external switching quantity signal, the response and action time of the system and the pulse width of the switching current signal and the voltage current signal. It is mainly used for measuring the power supply switch time, holding time, Up along down along time, as well as Fuse blown time and circuit breaker response time.



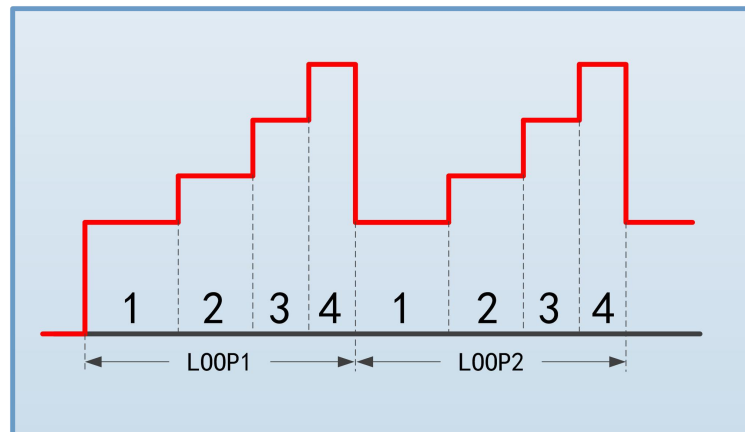
Battery test

The FT63200A / E-series electronic load has the battery test function. Three discharge modes of fixed current, fixed resistance and fixed power are provided. The discharge cut-off conditions can be set by themselves: cut-off voltage, cut-off time and cut-off power quantity. Any one of the three conditions are met, and the discharge is stopped. During the discharge process, record the discharge quantity and the discharge time. The FT63200A / E series Conduct Resistance internal resistance and capacity testing by DC discharge method (DCR).



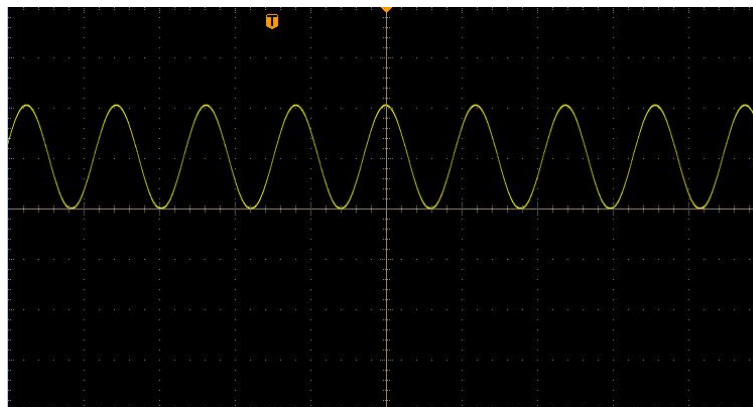
Sequence function

The FT63200A / E Series electronic load provides sequence testing capabilities to edit up to 50 test files with 100 steps each. It supports the load timing changes in various modes such as CC, CV, CR, and CP, and also supports the sequence editing functions such as file link. Up to 5000 steps of timing editing, a single step time range: 0.1ms~99999s.



Sine wave dynamic band load

The FT63200A / E series has the sine wave band carrier current function, which can be used in the impedance analysis test of fuel cells.

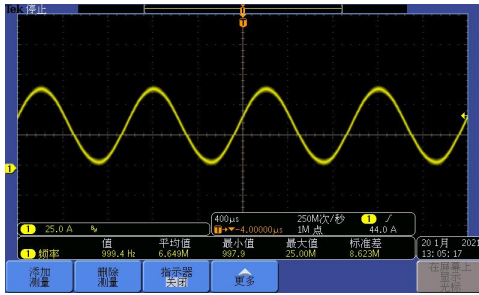


Cascade connection

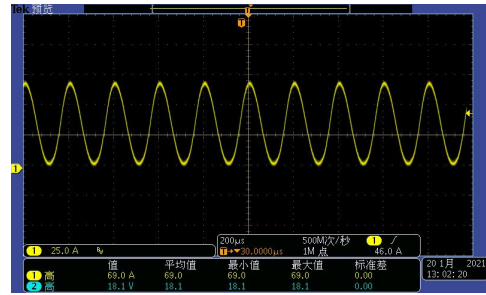
The FT63200A / E-series cascade function supports up to 10 parallel loads, expanding the power use range of the electronic load. During the cascade, Each load automatically equalizes the flow, and the slave machine automatically copies the load parameters of the host. Single-alone can also be used independently, power configuration is more flexible.

External simulation programming

The FT63200A / E series has an external analog programming function. Other devices may continuously control the load by an external voltage signal (DC or AC). External voltage signal of 0~10V corresponds to 0~100% full range with carrying current. This feature can also be used for a variety of complex band carrier form tests.



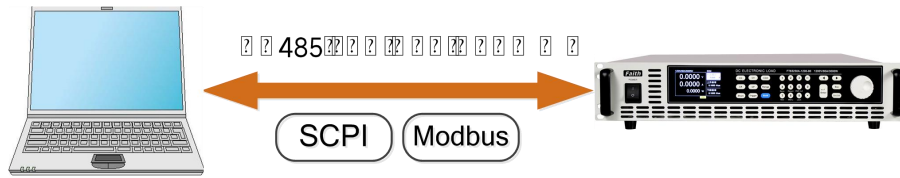
1kHz sine wave



5kHz sine wave

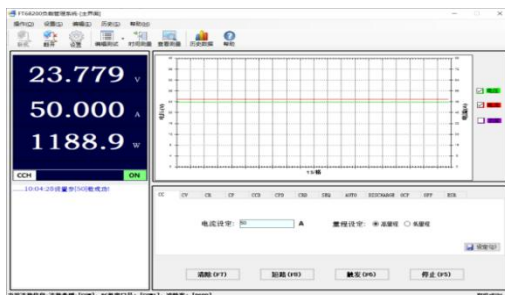
Multiple interfaces and multiple protocols

The FT63200A / E series is equipped with a variety of communication interfaces, and supports both SCPI and Modbus communication protocols. Users can configure it on the menu according to their needs, which makes the system integration more flexible.



Computer graphics operation software

FT63200A / E series provides a superior computer software with virtual instrument function, which can read test data, generate images, export reports, print reports, etc., convenient for customers to use.

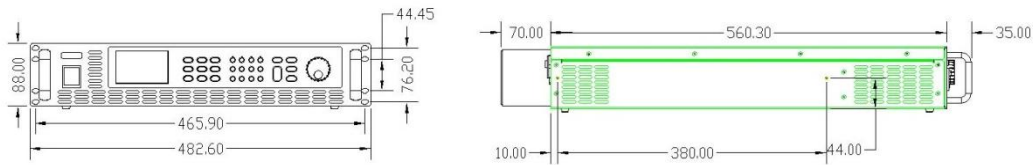


Order information

Product line	Power level	150V	600V	1200V	Height
A SERIES	600W	FT63206A-150-60	FT63206A-600-40	FT63206A-1200-15	2U
	750W	FT63207A-150-75	FT63207A-600-50	FT63207A-1200-20	2U
	1200W	FT63212A-150-120	FT63212A-600-75	FT63212A-1200-30	2U
	1500W	FT63215A-150-150	FT63215A-600-100	FT63215A-1200-40	2U
	2250W	FT63222A-150-225	FT63222A-600-150	FT63222A-1200-60	2U
	3000W	FT63230A-150-300	FT63230A-600-200	FT63230A-1200-80	2U
E SERIES	600W	FT63206E-150-60	FT63206E-600-40	FT63206E-1200-15	2U
	750W	FT63207E-150-75	FT63207E-600-50	FT63207E-1200-20	2U
	1200W	FT63212E-150-120	FT63212E-600-75	FT63212E-1200-30	2U
	1500W	FT63215E-150-150	FT63215E-600-100	FT63215E-1200-40	2U
	2250W	FT63222E-150-225	FT63222E-600-150	FT63222E-1200-60	2U
	3000W	FT63230E-150-300	FT63230E-600-200	FT63230E-1200-80	2U

Dimensioned drawing

2U Model size diagram



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Optional information

Name	Model or specification	Instruction
Computer graphics operation software	FT63201A/E FaithLoad	FT63200A/E computer software
CAN Adapt card	FT63201C	
Run cables in parallel (1M)	PC010-682	

Optional accessories High-current test cable selection table

Wire spec	DC2-2P 15M	DC16-2 P15M	DC25-2P 20M	DC50-2P20 M	DC50-2P40 M	DC120-2P 20M	DC150-2 P20M
Maximum Voltage	750V						
Maximum Current	10A	60A	100A	200A	200A	300A	400A
Terminal	M8/alligator clip	M8/M8	M8/M8	M8/M8	M8/M8	M8/M8	M10/M10
Length	About 1.5m	About 1.5m	About 2m	About 2m	About 4m	About 2m	About 2m
Appearance							

Specification table-1:

Model	FT63206E-150-60		FT63206E-600-40		FT63206E-1200-15	
Voltage	150V		600V		1200V	
Current	60A		40A		15A	
Power	600W		600W		600W	
Minimum Voltage	1.5V@60A		8V@40A		20V@15A	
Constant current		Constant current		Constant current		
Range	6A	60A	4A	40A	1.5A	15A
Resolution ratio	0.1mA	1mA	0.07mA	0.7mA	0.025mA	0.25mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage		Constant voltage		Constant voltage		
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance		Constant resistance		Constant resistance		
Range	0.09~500Ω	0.9~ 2500Ω	0.56~ 3000Ω	5.6~15000Ω	3~16000Ω	30~80000Ω
Precision accuracy	Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.	
Constant power		Constant power		Constant power		
Range	600W		600W		600W	
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.	
Dynamic state		Dynamic state		Dynamic state		
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution ratio	2us		2us		2us	
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~ 0.06A/us	0.01~ 0.6A/us	0.0001~ 0.004A/us	0.001~0.4A/us	0.0001~ 0.025A/us	0.001~0.25A/us
Electric current measurement		Electric current measurement		Electric current measurement		
Range	6A	60A	4A	40A	1.5A	15A
Resolution ratio	0.1mA	1mA	0.07mA	0.7mA	0.025mA	0.25mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement		Voltage measurement		Voltage measurement		
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specifications		Other specifications		Other specifications		
AC voltage	220VAC±10%, 50~60Hz, 220VA					
Temperature	0~40℃					
Weight	18kg					
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Spec table-2:

Model	FT63207E-150-75		FT63207E-600-50		FT63207E-1200-20		
Voltage	150V		600V		1200V		
Current	75A		50A		20A		
Power	750W		750W		750W		
Minimum operating Voltage	1.5V@75A		8V@50A		20V@20A		
Constant current		Constant current		Constant current		constant current	
Range	7.5A	75A	5A	50A	2A	20A	
Resolution ratio	0.15mA	1.5mA	0.1mA	1mA	0.05mA	0.5mA	
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Constant voltage		Constant voltage		Constant voltage		constant voltage	
Range	30V	150V	120V	600V	240V	1200V	
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Constant resistance		Constant resistance		Constant resistance		Constant resistance	
Range	0.074~ 400Ω	0.74~2000Ω	0.446~ 2400Ω	4.46~12000Ω	2.23~12000Ω	22.3~ 60000Ω	
Precision accuracy	Vin/Rset*(0.2%)+0.2%IF.S		Vin/Rset*(0.2%)+0.2%IF.S		Vin/Rset*(0.2%)+0.2%IF.S		
Constant power		Constant power		Constant power		Constant power	
Range	750W		750W		750W		
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.		
Dynamic state		Dynamic state		Dynamic state		dynamic state	
T1&T2	10us~60s		10us~60s		10us~60s		
Resolution ratio	2us		2us		2us		
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM		
Slope	0.001~ 0.07A/us	0.001~ 0.7A/us	0.0001~ 0.05A/us	0.001~0.5A/us	0.0001~0.03A/us	0.001~ 0.3A/us	
Electric current measurement		Electric current measurement		Electric current measurement		electric current measurement	
Range	7.5A	75A	5A	50A	2A	20A	
Resolution ratio	0.15mA	1.5mA	0.1mA	1mA	0.05mA	0.5mA	
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Voltage measurement		Voltage measurement		Voltage measurement		voltage measurement	
Range	30V	150V	120V	600V	240V	1200V	
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Other specifications		Other specifications		Other specifications		Other specifications	
AC voltage	220VAC±10%, 50~60Hz, 220VA						
Temperature	0~40°C						
Weight	16kg						
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)						

Spec table-3:

Model	FT63212E-150-120		FT63212E-600-75		FT63212E-1200-30	
Voltage	150V		600V		1200V	
Current	120A		75A		30A	
Power	1200W		1200W		1200W	
Minimum operating Voltage	1.5V@120A		8V@75A		20V@30A	
Constant current		Constant current		constant current		
Range	12A	120A	7.5A	75A	3A	30A
Resolution ratio	0.2mA	2mA	0.125mA	1.25mA	0.05mA	0.5mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage		Constant voltage		constant voltage		
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance		Constant resistance		Constant resistance		
Range	0.045~ 250Ω	0.45~ 1250Ω	0.3~1600Ω	3~8000Ω	1.5~8000Ω	15~40000Ω
Precision accuracy	Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.	
Constant power		Constant power		Constant power		
Range	1200W		1200W		1200W	
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.	
Dynamic state		Dynamic state		dynamic state		
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution ratio	2us		2us		2us	
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~ 0.12A/us	0.01~ 1.2A/us	0.0001~ 0.075A/us	0.001~0.75A/us	0.0001~0.045A/us	0.001~ 0.45A/us
Electric current measurement		Electric current measurement		electric current measurement		
Range	12A	120A	7.5A	75A	3A	30A
Resolution ratio	0.2mA	2mA	0.125mA	1.25mA	0.05mA	0.5mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement		Voltage measurement		voltage measurement		
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specifications		Other specifications		Other specifications		
AC voltage	220VAC±10%, 50~60Hz, 220VA					
Temperature	0~40℃					
Weight	18kg					
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Spec table-4:

Model	FT63215E-150-150		FT63215E-600-100		FT63215E-1200-40	
Voltage	150V		600V		1200V	
Current	150A		100A		40A	
Power	1500W		1500W		1500W	
Minimum Voltage	1.5V@150A		8V@100A		20V@40A	
Constant current			constant current		constant current	
Range	15A	150A	10A	100A	4A	40A
Resolution ratio	0.3mA	3mA	0.2mA	2mA	0.1mA	1mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage			constant voltage		constant voltage	
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance			Constant resistance		Constant resistance	
Range	0.037~ 200Ω	0.37~ 1000Ω	0.223~1200Ω	2.23~ 6000Ω	1.115~6000Ω	11.15~ 30000Ω
Precision accuracy	Vin/Rset*(0.2%)+0.2% F.S.		Vin/Rset*(0.2%)+0.2% IF.S.		Vin/Rset*(0.2%)+0.2% IF.S.	
Constant power			Constant power		Constant power	
Range	1500W		1500W		1500W	
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.	
Dynamic state			dynamic state		dynamic state	
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution ratio	2us		2us		2us	
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~ 0.14A/us	0.01~ 1.4A/us	0.0001~ 0.1A/us	0.001~ 1A/us	0.0001~0.06A/us	0.001~ 0.6A/us
Electric current measurement			electric current measurement		electric current measurement	
Range	15A	150A	10A	100A	4A	40A
Resolution ratio	0.3mA	3mA	0.2mA	2mA	0.1mA	1mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement			voltage measurement		voltage measurement	
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specifications			Other specifications		Other specifications	
AC voltage	220VAC±10%, 50~60Hz, 220VA					
Temperature	0~40°C					
Weight	18kg					
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Spec table-5:

Model	FT63222E-150-225		FT63222E-600-150		FT63222E-1200-60	
Voltage	150V		600V		1200V	
Current	225A		150A		60A	
Power	2250W		2250W		2250W	
Minimum Voltage	1.5V@225A		8V@150A		20V@60A	
Constant current			constant current			constant current
Range	22.5A	225A	15A	150A	6A	60A
Resolution ratio	0.45mA	4.5mA	0.3mA	3mA	0.15mA	1.5mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage			constant voltage			constant voltage
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance			Constant resistance			Constant resistance
Range	0.025~ 89Ω	0.25~ 444Ω	0.149~533Ω	1.49~ 2667Ω	0.743~2667Ω	7.43~ 13333Ω
Precision accuracy	Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.	
Constant power			Constant power			Constant power
Range	2250W		2250W		2250W	
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.	
Dynamic state			dynamic state			dynamic state
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution ratio	2us		2us		2us	
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~ 0.21A/us	0.01~ 2.1A/us	0.0001~ 0.15A/us	0.001~ 1.5A/us	0.0001~0.09A/us	0.001~ 0.9A/us
Electric current measurement			electric current measurement			electric current measurement
Range	22.5A	225A	15A	150A	9A	90A
Resolution ratio	0.4mA	4mA	0.3mA	3mA	0.2mA	2mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement			voltage measurement			voltage measurement
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specifications			Other specifications			Other specifications
AC voltage	220VAC±10%, 50~60Hz, 220VA					
Temperature	0~40°C					
Weight	20kg					
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Spec table-5:

Model	FT63230E-150-300		FT63230E-600-200		FT63230E-1200-80	
Voltage	150V		600V		1200V	
Current	300A		200A		80A	
Power	3000W		3000W		3000W	
Minimum Voltage	1.5V@300A		8V@200A		20V@80A	
Constant current		constant current		constant current		constant current
Range	30A	300A	20A	200A	8A	80A
Resolution ratio	0.6mA	6mA	0.4mA	4mA	0.2mA	2mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage		constant voltage		constant voltage		constant voltage
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance		Constant resistance		Constant resistance		Constant resistance
Range	0.019~ 100Ω	0.19~500Ω	0.112~600Ω	1.12~ 3000Ω	0.558~ 3000Ω	5.58~15000Ω
Precision accuracy	Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.		Vin/Rset*(0.2%)+0.2%IF.S.	
Constant power		Constant power		Constant power		Constant power
Range	3000W		3000W		3000W	
Precision accuracy	0.2%+0.2% F.S.		0.2%+0.2% F.S.		0.2%+0.2% F.S.	
Dynamic state		dynamic state		dynamic state		dynamic state
T1&T2	10us~60s		10us~60s		10us~60s	
Resolution ratio	2us		2us		2us	
Precision accuracy	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~ 0.28A/us	0.01 ~ 2.8A/us	0.0001~0.2A/us	0.001~ 2A/us	0.0001~ 0.12A/us	0.001~1.2A/us
Electric current measurement		electric current measurement		electric current measurement		electric current measurement
Range	30A	300A	20A	200A	8A	80A
Resolution ratio	0.6mA	6mA	0.4mA	4mA	0.2mA	2mA
Precision accuracy	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement		voltage measurement		voltage measurement		voltage measurement
Range	30V	150V	120V	600V	240V	1200V
Resolution ratio	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision accuracy	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specifications		Other specifications		Other specifications		Other specifications
AC voltage	220VAC±10%, 50~60Hz, 220VA					
Temperature	0~40℃					
Weight	22kg					
Size	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

FT63200A/E List of functional configurations

List of functions	A	E
constant current (CCH/CCL)	✓	✓
constant voltage (CVH/CVL)	✓	✓
constant-resistance (CR)	✓	✓
constant-power (CP)	✓	✓
dynamic current (CCDH/CCDL)	✓	✓
dynamic resistance (CRD)	✓	x
dynamic power (CPD)	✓	x
sequence (SEQ)	✓	✓
automatic (Auto)	✓	✓
overcurrent (OCP)	✓	✓
overpower (OPP)	✓	✓
discharge (DISCHARGE)	✓	✓
Load effect (LOEF)	✓	✓
internal resistance (ESR)	✓	✓
LED analog (LED)	✓	x
Dynamic sweep frequency (SWEEP)	✓	✓
Constant Voltage + constant current (CV+CC)	✓	x
Constant resistance + constant current (CR+CC)	✓	x
Constant power + constant current (CP+CC)	✓	x
save	✓	✓
Call up	✓	✓
Remote compensation	✓	✓
Constant Voltage speed	✓	✓
Simulation programming	✓	✓
External control	✓	✓
Simulation short circuit	✓	✓
Timed with load	✓	✓
VON/VOFF	✓	✓
Limit setting	✓	✓
hardware restriction	✓	✓
Protection Settings	✓	✓
time measurement	✓	✓
Vpk+/-	✓	✓
data transmission	1kHz/s	1kHz/s
parallel operation		
communication	RS485/LAN/USB (CAN optional)	

*All specifications are subject to change without prior notice.