

FT63200A/E/H series

Medium power electronic load



Features

- High power density design, the whole machine can achieve 3kW/2U;
- Single power: 600W ~ 3000W, the maximum power can be extended to 30kW through the master/slave parallel;
- Voltage level: 150V, 600V, 1200V;
- High precision, voltage accuracy is (0.025%+0.025%F.S.); The current accuracy is (0.05%+0.05%F.S.);
- Multiple working modes: CC, CV, CR, CP, CRD, CPD, CV+CC, CR+CC, CP+CC operation mode;
- Sampling speed 500kHz;
- The maximum current slope for a single unit is 40A/us (H series).
- 30kHz dynamic scanning function;
- Remote data transmission rate up to 1kHz, can greatly improve the communication interface data acquisition capability;
- Instantaneous over-power load function, instant load capacity can reach twice 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 band load function, sequence function;
- Comprehensive protection functions: 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 display, Chinese and English menu interface;
- Equipped with a variety of communication interfaces: RS485, LAN, USB, RS232, CAN (optional);
- Supports SCPI and ModBus communication protocols.

Cascade

The cascade function of the FT63200A/E/H series supports the parallel use of up to 10 loads, extending the power usage range of electronic loads. During the cascading process, each load automatically equalizes traffic, and the slave automatically copies the load parameters of the host. Single machine can also be used independently, more flexible power configuration.

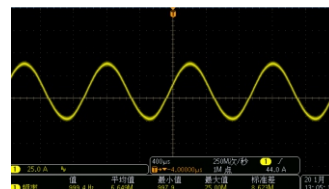
Summary

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

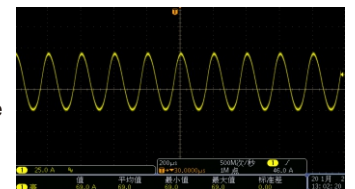
The FT63200A/E/H series has three voltage ranges of 150V, 600V and 1200V, and the single power range is from 600W to 3kW. Its wider working range and extremely fast dynamic frequency effectively increase the test capability and application range. The whole series of products have strong overload capacity, and the instantaneous over-power pulling can reach 2 times the rated power, which can effectively reduce the test cost. FT63200A/E/H has LAN, RS485, CAN, USB, RS232 and other communication interfaces and analog interfaces, and supports SCPI, Modbus, CANopen communication protocols, which provides great convenience for system integration applications.

External simulation programming

The FT63200A/E/H series has external analog programming capabilities. Other devices can continuously control the load via an external voltage signal (DC or AC). The external voltage signal of 0 ~ 10V corresponds to 0 ~ 100% full scale on-load current. This function can also be used for various complex band carrier shape tests.



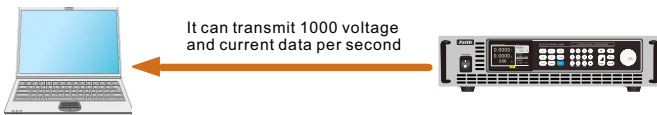
1kHz sine wave



5kHz sine wave

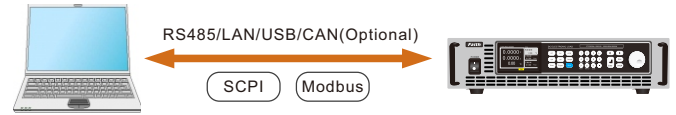
1kHz data transmission

FT63200A/E/H series can provide users with up to 1kHz data transmission, that is, 1000 voltage and current data points per second, in order to achieve waveform rendering and dynamic data analysis functions. In the application of system integration, the host computer can get a lot of test data directly and reduce the cost by this function without oscilloscope and high-speed current acquisition hardware.



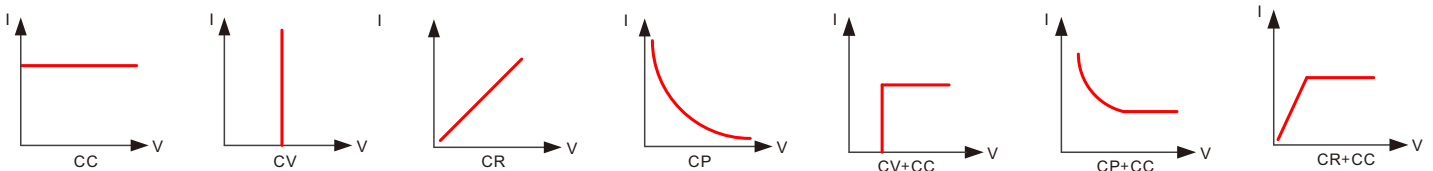
Multi-interface and multi-protocol

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



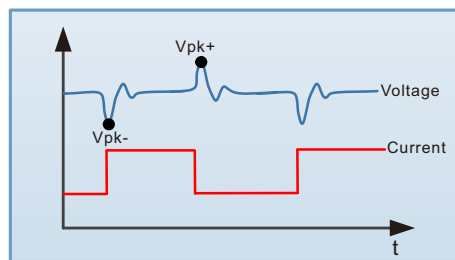
Multiple operating modes

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



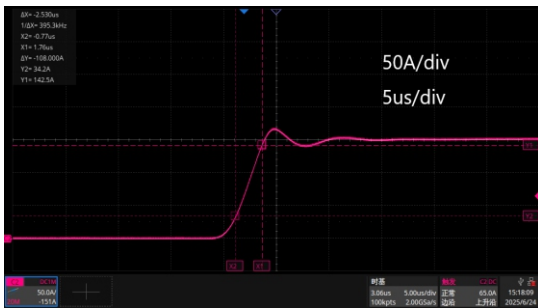
30kHz dynamic sweep, Vpk+/- capture

FT63200A/E/H series has dynamic sweep function, the maximum frequency can be set 30kHz. During the test, the peak voltage Vpk+, valley voltage Vpk- and the occurrence frequency of the measured power supply are captured and recorded by adjusting the current pulling frequency. It can effectively test the dynamic response of various power supplies at different frequencies.



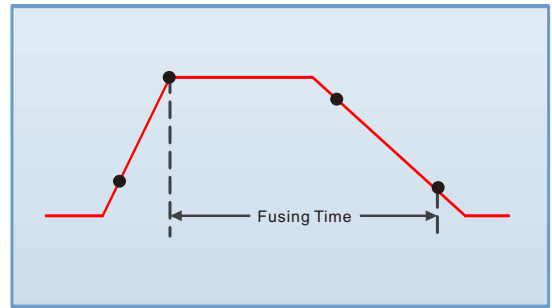
Ultra-high current slope

FT63200H series has ultra-high current slope, the maximum slope of stand-alone current can be up to $40\text{A}/\mu\text{s}$. In the ever-changing test demand, it can instantly complete the load switching, accurately simulate the current mutation in real working conditions, whether it is the transient response test of the switching power supply, or the rapid load pulling evaluation of the chip core power supply, it can provide the micro-second dynamic response, so that the test data can be more timely and accurate. test data more timely and accurate.



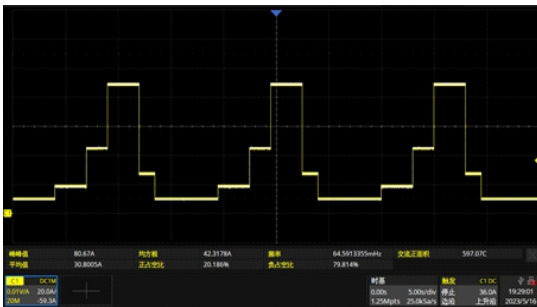
Time measurement

FT63200A/E/H series electronic load with time measurement function. By capturing the external switching signal, combined with the switching signal and the voltage and current signal, the response and operation time of the system and the pulse width of the pulse current can be measured. It is mainly used to measure the on-off time, holding time, rising edge and falling edge time of the power supply, as well as the fuse fuse time and circuit breaker response time.



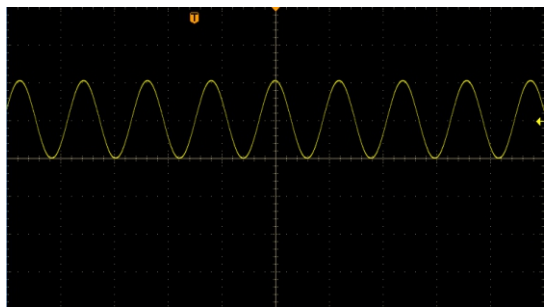
Sequence function

The FT63200A/E/H series of electronic loads provides sequential test capability for editing up to 50 test files with 100 steps each. It supports load timing changes in CC, CV, CR, CP and other modes, and also supports sequence editing functions such as file link. A maximum of 5000 steps can be edited. The time range of a single step is 0.1ms to 99999s.



Sine wave dynamic load

The FT63200A/E/H series is equipped with sine-wave current-carrying function and can be used for impedance analysis and testing of fuel cells.

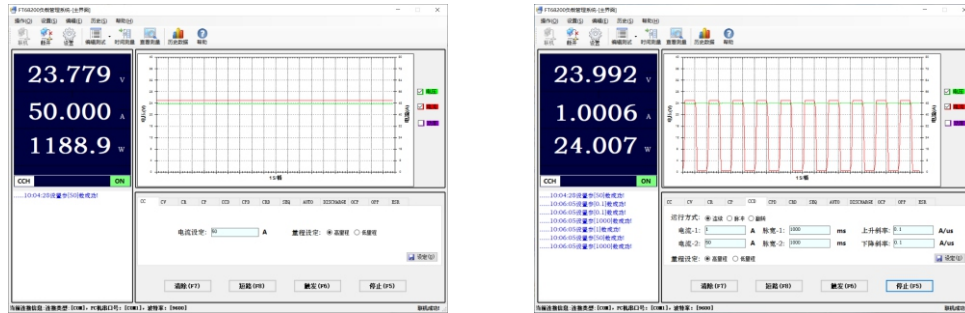


Instantaneous overpower loading function

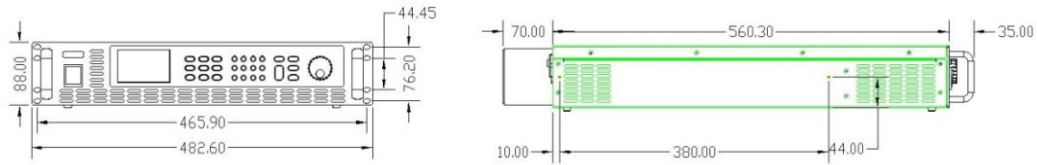
The FT63200A/E/H series of electronic loads have instantaneous loading capacity of more than twice the rated power. In simulating DC motor starting characteristics, instantaneous overload characteristics of power supply, instantaneous high-rate discharge characteristics of power battery, instantaneous load capacity of power electronic devices and other instantaneous high-power loading test, it can greatly save costs.

Computer graphical operation software

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



Dimension drawing



2U model dimension

Order information

Product series	Power	150V	600V	1200V	Height
A series	600W	FT63206A-150-60	FT63206A-600-40	FT63206A-1200-15	2U
	600W	FT63206A-150-120	-	-	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
	600W	FT63206E-150-120	-	-	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
H series	600W	FT63206H-150-60	FT63206H-600-40	FT63206H-1200-12	2U
	750W	FT63207H-150-75	FT63207H-600-50	FT63207H-1200-15	2U
	1200W	FT63212H-150-120	FT63212H-600-75	FT63212H-1200-24	2U
	1500W	FT63215H-150-150	FT63215H-600-100	FT63215H-1200-30	2U
	2250W	FT63222H-150-225	FT63222H-600-150	FT63222H-1200-45	2U
	3000W	FT63230H-150-300	FT63230H-600-200	FT63230H-1200-60	2U

Note: H is the high current slope version of function A.

*All specifications are subject to change without notice.

Optional information

Name	Model or Specification	Instruction
CAN adapter card	FT63201C	Factory installation before shipment

*Optional test cables and other optional parts, the relevant specifications and models are detailed in the "Optional Accessories" section of this manual.

Specification parameters-1

Model	FT63206A/E-150-60		FT63206A/E-600-40		FT63206A/E-1200-15	
Voltage	150V		600V		1200V	
Current	60A		40A		15A	
Power	600W		600W		600W	
Minimum operating voltage	1.5V@60A		8V@40A		20V@15A	
Constant current						
Range	6A	60A	4A	40A	1.5A	15A
Resolution	0.1mA	1mA	0.07mA	0.7mA	0.025mA	0.25mA
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance						
Range	0.09~500Ω	0.9~2500Ω	0.56~15000Ω	5.6~15000Ω	3~16000Ω	30~80000Ω
Precision	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						
Range	600W		600W		600W	
Precision	0.2%+0.2%F.S.		0.2%+0.2%F.S.		0.2%+0.2%F.S.	
Dynamic						
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution	2us		2us		2us	
Precision	1us+20PPM		1us+20PPM		1us+20PPM	
Slope	0.001~0.06A/us	0.001~0.6A/us	0.0001~0.04A/us	0.001~0.4A/us	0.0001~0.025A/us	0.001~0.25A/us
Current measurement						
Range	6A	60A	4A	40A	1.5A	15A
Resolution	0.1mA	1mA	0.07mA	0.7mA	0.025mA	0.25mA
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specification						
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA					
Operating temperature	0~40℃					
Weight	16kg					
Dimension	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Specification parameters-2

Model	FT63207A/E-150-75			FT63207A/E-600-50		FT63207A/E-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							
Range	7.5A	75A	5A	50A	2A	20A	
Resolution	0.15mA	1.5mA	0.1mA	1mA	0.05mA	0.5mA	
Precision	0.05%+0.05%F.S.			0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.			0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance							
Range	0.074~400Ω	0.74~2000Ω	0.446~2400Ω	4.46~12000Ω	2.23~12000Ω	22.3~60000Ω	
Precision	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							
Range	750W			750W		750W	
Precision	0. 2%+0. 2% F. S.			0. 2%+0. 2% F. S.		0. 2%+0. 2% F. S.	
Dynamic							
T1&T2	10us~60S			10us~60S		10us~60S	
Resolution	2us			2us		2us	
Precision	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	
Current measurement							
Range	7.5A	75A	5A	50A	2A	20A	
Resolution	0.15mA	1.5mA	0.1mA	1mA	0.05mA	0.5mA	
Precision	0.05%+0.05%F.S.			0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.			0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specification							
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA						
Operating temperature	0~40℃						
Weight	16kg						
Dimension	482.6mm(W)x 88.0mm(H)x 662.2mm(L)						

Specification parameters-3

Model	FT63212A/E-150-120		FT63212A/E-600-75		FT63212A/E-1200-30	
Voltage	150V		600V		1200V	
Current	120A		75A		30A	
Power	1200W		1200W		1200W	
Minimum operating voltage	1.5V@120A		14V@75A		20V@30A	
Constant current						
Range	12A	120A	7.5A	75A	3A	30A
Resolution	0.2mA	2mA	0.125mA	1.25mA	0.05mA	0.5mA
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Constant voltage						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Constant resistance						
Range	0.045~250Ω	0.45~1250Ω	0.3~1600Ω	3~8000Ω	1.5~8000Ω	15~40000Ω
Precision	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						
Range	1200W		1200W		1200W	
Precision	0.2%+0.2%F.S.		0.2%+0.2%F.S.		0.2%+0.2%F.S.	
Dynamic						
T1&T2	10us~60S		10us~60S		10us~60S	
Resolution	2us		2us		2us	
Precision	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
Current measurement						
Range	12A	120A	7.5A	75A	3A	30A
Resolution	0.2mA	2mA	0.125mA	1.25mA	0.05mA	0.5mA
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.	
Voltage measurement						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.	
Other specification						
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA					
Operating temperature	0~40℃					
Weight	18kg					
Dimension	482.6mm(W)x 88.0mm(H)x 662.2mm(L)					

Specification parameters-4

Model	FT63215A/E-150-150			FT63215A/E-600-100		FT63215A/E-1200-40	
Voltage	150V			600V		1200V	
Current	150A			100A		40A	
Power	1500W			1500W		1500W	
Minimum operating voltage	1.5V@150A			14V@100A		20V@40A	
Constant current							
Range	15A	150A	10A	100A	4A	40A	
Resolution	0.3mA	3mA	0.2mA	2mA	0.1mA	1mA	
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Constant voltage							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Constant resistance							
Range	0.037~200Ω	0.37~1000Ω	0.223~1200Ω	2.23~6000Ω	1.115~6000Ω	11.15~30000Ω	
Precision	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							
Range	1500W		1500W		1500W		
Precision	0. 2%+0. 2% F. S.		0. 2%+0. 2% F. S.		0. 2%+0. 2% F. S.		
Dynamic							
T1&T2	10us~60S		10us~60S		10us~60S		
Resolution	2us		2us		2us		
Precision	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	
Current measurement							
Range	15A	150A	10A	100A	4A	40A	
Resolution	0.3mA	3mA	0.2mA	2mA	0.1mA	1mA	
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Voltage measurement							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Other specification							
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA						
Operating temperature	0~40℃						
Weight	18kg						
Dimension	482.6mm(W)x 88.0mm(H)x 662.2mm(L)						

Specification parameters-5

Model	FT63222A/E-150-225			FT63222A/E-600-150			FT63222A/E-1200-60		
Voltage	150V			600V			1200V		
Current	225A			150A			60A		
Power	2250W			2250W			2250W		
Minimum operating voltage	1. 5V@225A			14V@150A			20V@60A		
Constant current									
Range	22. 5A	225A	15A	150A	6A	60A			
Resolution	0. 45mA	4. 5mA	0. 3mA	3mA	0. 15mA	1. 5mA			
Precision	0. 05%+0. 05%F. S.			0. 05%+0. 05%F. S.			0. 05%+0. 05%F. S.		
Constant voltage									
Range	30V	150V	120V	600V	240V	1200V			
Resolution	0. 5mV	2. 5mV	2mV	10mV	4mV	20mV			
Precision	0. 025%+0. 025%F. S.			0. 025%+0. 025%F. S.			0. 025%+0. 025%F. S.		
Constant resistance									
Range	0. 025~89Ω	0. 25~444Ω	0. 149~533Ω	1. 49~2667Ω	0. 743~2667Ω	7. 43~13333Ω			
Precision	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									
Range	2250W			2250W			2250W		
Precision	0. 2%+0. 2% F. S.			0. 2%+0. 2% F. S.			0. 2%+0. 2% F. S.		
Dynamic									
T1&T2	10us~60S			10us~60S			10us~60S		
Resolution	2us			2us			2us		
Precision	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. 06A/us	0. 001~0. 6A/us			
Current measurement									
Range	22. 5A	225A	15A	150A	6A	60A			
Resolution	0. 4mA	4mA	0. 3mA	3mA	0. 15mA	1.5mA			
Precision	0. 05%+0. 05%F. S.			0. 05%+0. 05%F. S.			0. 05%+0. 05%F. S.		
Voltage measurement									
Range	30V	150V	120V	600V	240V	1200V			
Resolution	0. 5mV	2. 5mV	2mV	10mV	4mV	20mV			
Precision	0. 025%+0. 025%F. S.			0. 025%+0. 025%F. S.			0. 025%+0. 025%F. S.		
Other specification									
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA								
Operating temperature	0~40℃								
Weight	20kg								
Dimension	482. 6mm (W) x 88. 0mm (H) x 662. 2mm (L)								

Specification parameters-6

Model	FT63230A/E-150-300			FT63230A/E-600-200		FT63230A/E-1200-80	
Voltage	150V			600V		1200V	
Current	300A			200A		80A	
Power	3000W			3000W		3000W	
Minimum operating voltage	1.5V@300A			14V@200A		20V@80A	
Constant current							
Range	30A	300A	20A	200A	8A	80A	
Resolution	0.6mA	6mA	0.4mA	4mA	0.2mA	2mA	
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Constant voltage							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Constant resistance							
Range	0.019~100Ω	0.19~500Ω	0.112~600Ω	1.12~3000Ω	0.558~3000Ω	5.58~15000Ω	
Precision	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							
Range	3000W		3000W		3000W		
Precision	0.2%+0.2%F.S.		0.2%+0.2%F.S.		0.2%+0.2%F.S.		
Dynamic							
T1&T2	10us~60s		10us~60s		10us~60s		
Resolution	2us		2us		2us		
Precision	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	
Current measurement							
Range	30A	300A	20A	200A	8A	80A	
Resolution	0.6mA	6mA	0.4mA	4mA	0.2mA	2mA	
Precision	0.05%+0.05%F.S.		0.05%+0.05%F.S.		0.05%+0.05%F.S.		
Voltage measurement							
Range	30V	150V	120V	600V	240V	1200V	
Resolution	0.5mV	2.5mV	2mV	10mV	4mV	20mV	
Precision	0.025%+0.025%F.S.		0.025%+0.025%F.S.		0.025%+0.025%F.S.		
Other specification							
AC voltage	110Vac/220Vac±10%, 50~60Hz, 220VA						
Operating temperature	0~40℃						
Weight	22kg						
Dimension	482.6mm(W)x 88.0mm(H)x 662.2mm(L)						

Specification parameters-7

Model	FT63230H-150-300		FT63230H-600-200		FT63230H-1200-60	
Voltage	150V		600V		1200V	
Current	300A		200A		60A	
Power	3000W		3000W		3000W	
Minimum operating voltage	1. 5V@300A		8V@200A		20V@60A	
Constant current						
Range	30A	300A	20A	200A	6A	60A
Resolution	0. 6mA	6mA	0. 4mA	4mA	0. 1mA	1mA
Precision	0. 1%+0. 1%F. S.		0. 1%+0. 1%F. S.		0. 1%+0. 1%F. S.	
Constant voltage						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0. 5mV	2. 5mV	2mV	10mV	4mV	20mV
Precision	0. 025%+0. 025%F. S.		0. 025%+0. 025%F. S.		0. 025%+0. 025%F. S.	
Constant resistance						
Range	0. 019~100Ω	0. 19~500Ω	0. 112~600Ω	1. 12~3000Ω	0. 75~4000Ω	7. 5~20000Ω
Precision	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						
Range	3000W		3000W		3000W	
Precision	0. 2%+0. 2% F. S.		0. 2%+0. 2% F. S.		0. 2%+0. 2% F. S.	
Dynamic						
T1&T2	10us~60s		10us~60s		10us~60s	
Resolution	2us		2us		2us	
Precision	1us+20PPM		1us+20PPM		1us+20PPM	
Slope (A/us)	0. 001~4	0. 001~40	0. 001~2	0. 001~20	0. 001~0. 6	0. 001~6
Current measurement						
Range	30A	300A	20A	200A	6A	60A
Resolution	0. 6mA	6mA	0. 4mA	4mA	0. 1mA	1mA
Precision	0. 1%+0. 1%F. S.		0. 1%+0. 1%F. S.		0. 1%+0. 1%F. S.	
Voltage measurement						
Range	30V	150V	120V	600V	240V	1200V
Resolution	0. 5mV	2. 5mV	2mV	10mV	4mV	20mV
Precision	0. 025%+0. 025%F. S.		0. 025%+0. 025%F. S.		0. 025%+0. 025%F. S.	
Other specification						
AC voltage	110Vac/220Vac±10%, 50~60Hz, 260VA					
Temperature	0~40℃					
Weight	22kg					
Dimensions	482. 6mm (W) x 88. 0mm (H) x 662. 2mm (L)					

*All specifications are subject to change without notice.

1. Meet rated specifications within an ambient temperature range of 25±5℃.

2. If the operating voltage exceeds 1.05 times the rated voltage, permanent damage to the device may occur.

A/E/H function configuration list

Function list	A	E	H
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)	✓	✓	✓
Auto	✓	✓	✓
Over current protection	✓	✓	✓
Over power protection	✓	✓	✓
Discharge	✓	✓	✓
Load effect	✓	✓	✓
Discharge resistance	✓	✓	✓
LED simulation(LED)	✓	x	✓
Dynamic scanning(SWEEP)	✓	✓	✓
CV+CC	✓	x	✓
CR+CC	✓	x	✓
CP+CC	✓	x	✓
Save	✓	✓	✓
Recall	✓	✓	✓
Remote compensatio	✓	✓	✓
Constant voltage velocity	✓	✓	✓
Simulation programming	✓	✓	✓
External control	✓	✓	✓
Simulation short	✓	✓	✓
Timed load	✓	✓	✓
VON/VOFF	✓	✓	✓
Limit set	✓	✓	✓
Hardware limitation	✓	✓	✓
Protection set	✓	✓	✓
Time measurement	✓	✓	✓
Vpk+/-	✓	✓	✓
Data transmission	1kHz/s	1kHz/s	1kHz/s
Parallel operation	✓	✓	✓
Communication	RS485/LAN/RS232/USB (CAN optional)		