

FTB9000 Series

Wide range high power bidirectional programmable DC power supply



Features :

- Single range:
Voltage: 0~2250V Current: 0~±4500A Power: 0~±180kW
 - The master and slave parallel machines can extend the power up to 1.8MW;
 - Voltage accuracy: 0.05%+0.05%F.S.; Current accuracy: 0.1%+0.1%F.S.;
 - PF: 0.99, Overall efficiency higher than 93%; regenerative load function, high regenerative efficiency 95%;
 - Two-way energy transfer, seamless switching across quadrants;
 - Automatic line loss compensation;
 - With constant pressure, constant current, constant power, constant resistance function;
 - CV/CC Priority mode;
 - Voltage/current slope can be set;
 - With voltage output slow rise, slow fall function;
 - It has the function of charge and discharge;
 - With the function of sequence and waveform, it can realize the complex voltage and current waveform, such as automobile electronic test voltage waveform, user-defined;
 - Battery simulator function (optional);
 - Equipped with photovoltaic cell array simulation function (optional);
Over voltage, over current, over power, over temperature, under voltage, power off and other comprehensive protection function
 - High pressure isolation digital, analog, monitoring, control interface;
- Equipped with a variety of communication interfaces: LAN, USB, optional RS485, CAN or GPIB; Communication protocols support SCPI, MODBUS, and CAN-OPEN (optional); Provide communication programming manual, SDK development kit and demonstration of upper computer;
- TFT color LCD screen, Chinese, English, traditional menu interface; Intelligent Fan
 - Control
 - 3U/18kW high power density, standard 19-inch rack mounted design.

Application :

- Energy storage converters (PCS), microgrid equipment production and development;
- Server power supply, UPS, inverter production and development;
- Solar arrays, wind power applications;
- Fuel cell, power battery, lead battery, supercapacitor applications
- Aerospace, railway, new energy vehicles, motor drive testing applications;
- Uav, laser, sensor applications.

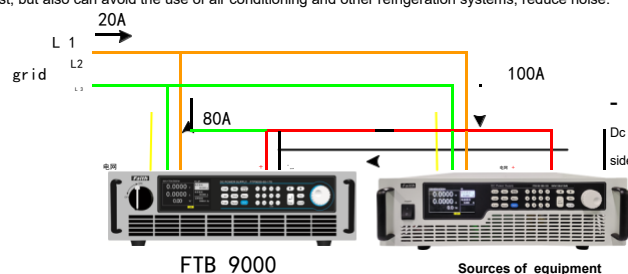
Brief Introduction

FTB9000 series products are a wide range of high power bidirectional programmable DC power supply with both DC power supply and feedback load function. It can not only realize the Source function, but also act as a feedback load to feed the absorbed energy back to the grid to realize the bidirectional flow of energy.

FTB9000 series voltage range from 80V to 2250V, single current up to 4500A, single maximum power of 180kW. It can realize seamless switch between source and load quadrants, and has rich testing functions and simple human-computer interaction interface. It is widely used in high-power testing scenarios such as automotive electronics, energy storage and fuel cells.

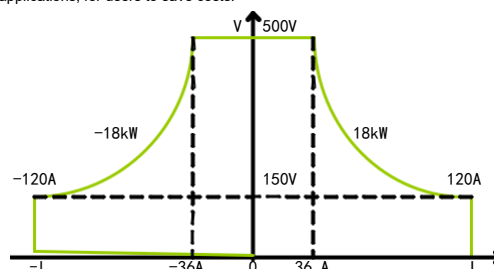
Regenerative electronic load function

FTB9000 series products have a feedback load function, which can feedback the energy of the equipment under test to the factory Intranet for direct use, rather than dissipating in the way of heat. Its energy feedback conversion efficiency is up to 95%, not only can greatly reduce the user's electricity cost, but also can avoid the use of air conditioning and other refrigeration systems, reduce noise.



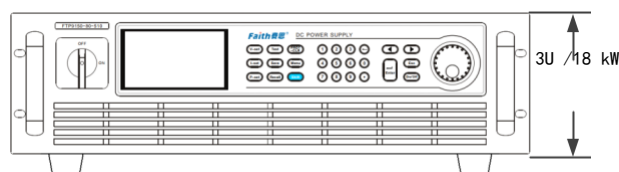
Dual quadrant, wide range

FTB9000 series products have dual quadrant operation characteristics, can be used as DC power output, and can be used as a feedback load to absorb energy. At the same time, the FTB9000 has a wide operating range, with more than 3 times the wide range of output range, one power supply can cover more applications, for users to save costs.



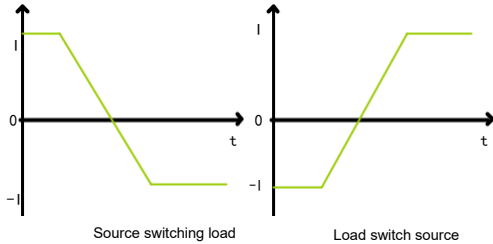
3U/18kW High power density

The FTB9000 series offers a high power density of 3U/18kW, featuring accurate output, fast response and low ripple noise. Wide range of voltage 80V ~ 2250V, current 25A ~ 4500A combination, suitable for every test and verification link from design to production process.



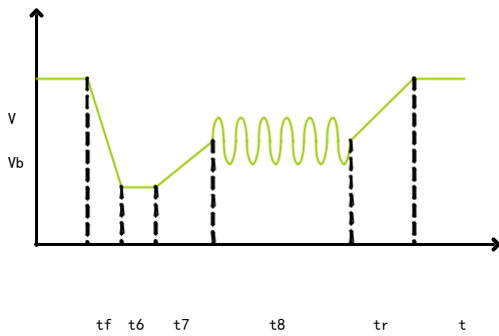
Seamless switching of bidirectional current

When the conventional DC power supply and load switch between positive and negative currents, a short step will be generated at 0A, resulting in discontinuous current commutation. FTB9000 not only has the dual quadrant working ability, but also has the high-speed current switching ability, which can realize the seamless connection between positive and negative current switching, effectively avoid voltage or current overshooting. It is widely used in the test of motor, battery pack, BMS and energy storage system.



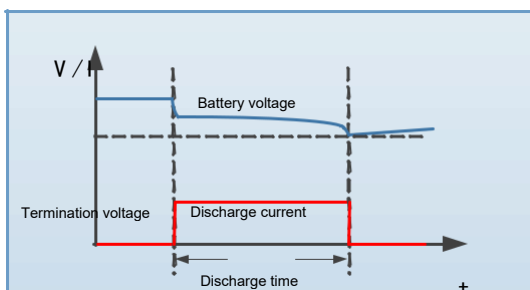
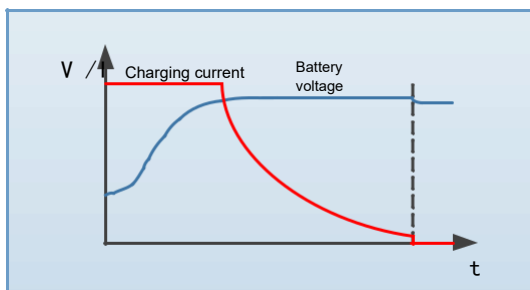
Sequence and waveform functions

The FTB9000 provides users with sequence editing for power outages, transient drops, and other voltage and current variations. A total of 10 sequence files, each file 100 steps, support loop, link to facilitate the realization of complex waveform output.



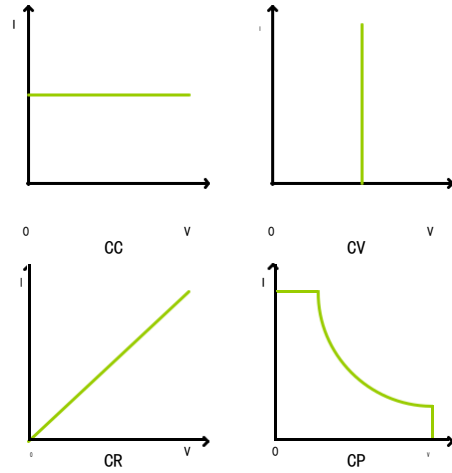
Battery charge/discharge test

FTB9000 series has charge/discharge test function due to its unique bidirectional design, which is suitable for charge/discharge test of all kinds of batteries and energy storage devices.



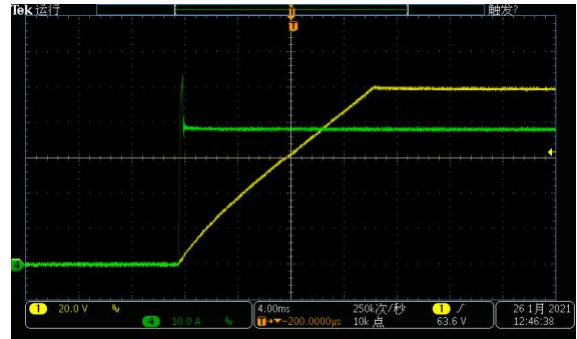
Load function :

FTB9000 as a feedback load, with constant current, constant voltage, constant power, constant resistance four basic working modes, can meet a wide range of testing needs.

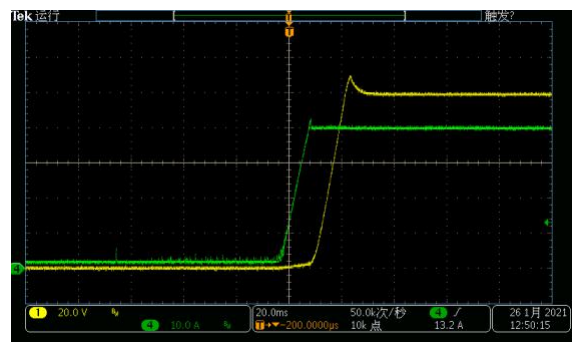


CV、CC priority

When the power output is connected to the inductive or capacitive load, the output current or voltage will overshoot to a certain extent. In some cases, the protection of the device under test will be triggered. In serious cases, the device under test will be damaged directly. FTB9000 series has CV and CC output priority function to effectively suppress output overshoot and its impact.



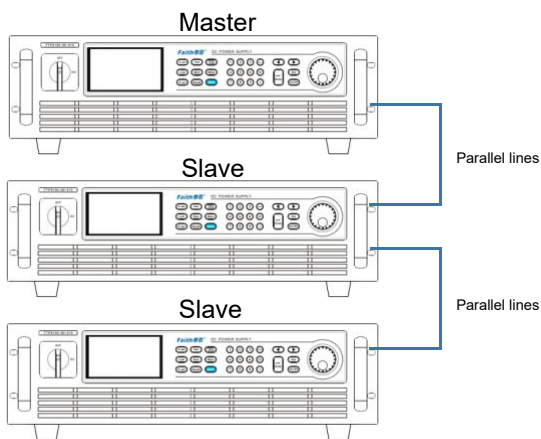
CV Priority (high speed build up voltage, current overshoot)



CC Priority (high speed build up current, voltage overshoot)

Master and slave parallel machine function

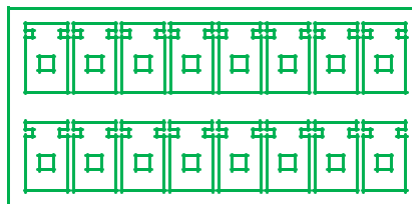
FTB9000 series power supply provides master/slave parallel mode, supporting 10 power supply of the same model for parallel operation, so that users can achieve more power expansion. In parallel operation, the host automatically merges display parameters, and the slave automatically copies the set parameters of the host to realize automatic flow sharing.



Composite signal port (optional)

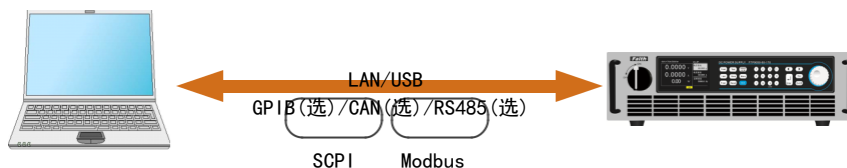
FTB9000 series can be equipped with composite signal port, which has the following functions:

- READY :Indicates the working status of power supply;
- Output mode indication;
- Composite external control;
- Voltage and current output monitoring;
- Voltage, current and power programming control;
- Master and slave communication.



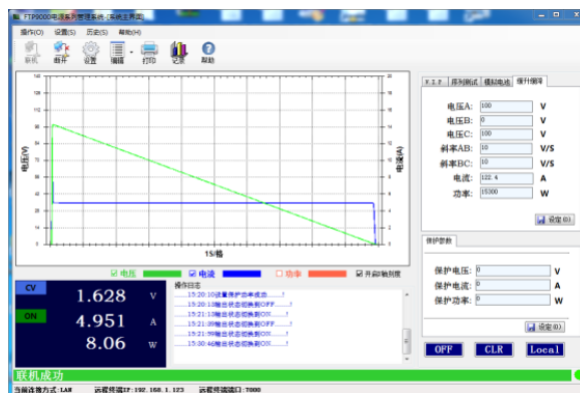
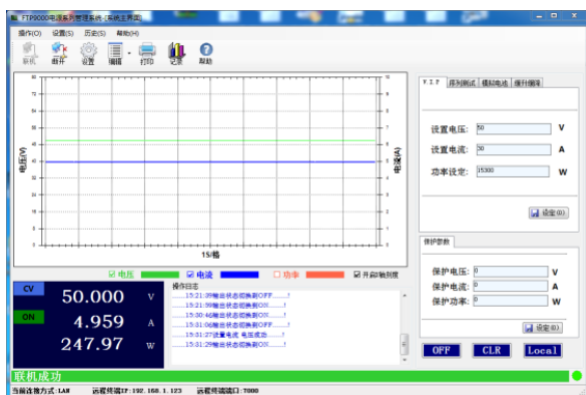
Multiple interfaces and multiple protocols

The FTB9000 series is equipped with a variety of communication interfaces and supports SCPI and Modbus communication protocols. Users can configure in the menu according to their requirements, which makes the system integration more flexible.



Computer graphical operating software

FTB9000 series provides an upper 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.

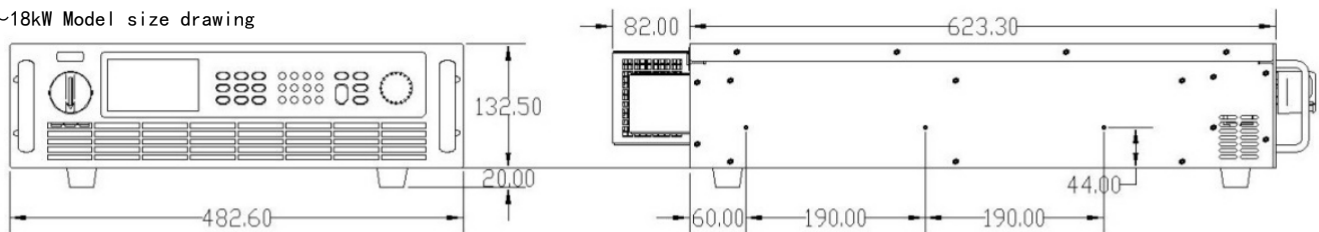


Order information

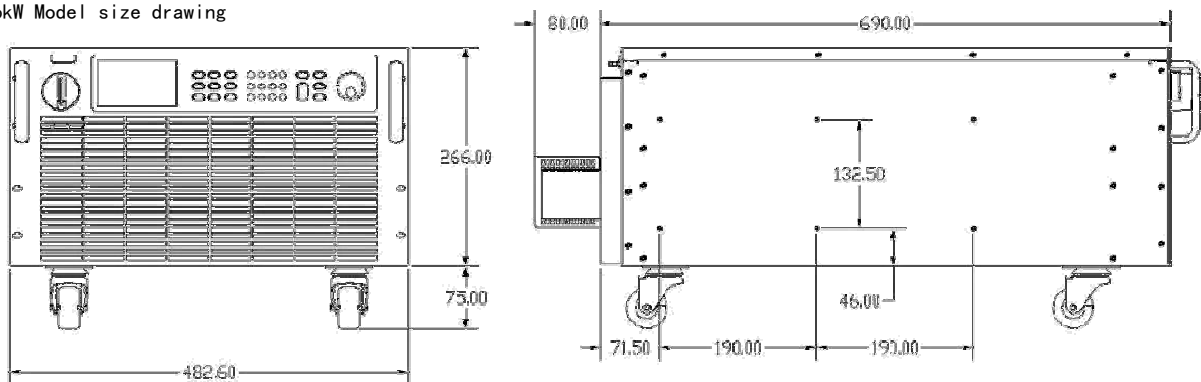
Voltage	Model	Current	Power	Size	Volatage	Model	Current	Power	Size
80V	FTB9050-80-150	150A	5kW	3U	300V	FTB9060-300-75	75A	6kW	3U
	FTB9100-80-300	300A	10kW	3U		FTB9120-300-150	150A	12kW	3U
	FTB9150-80-450	450A	15kW	3U		FTB9180-300-225	225A	18kW	3U
	FTB9300-80-900	900A	30kW	6U		FTB9360-300-450	450A	36kW	6U
	FTB9450-80-1350	1350A	45kW	16U		FTB9540-300-675	675A	54kW	16U
	FTB9600-80-1800	1800A	60kW	16U		FTB9720-300-900	900A	72kW	16U
	FTB9750-80-2250	2250A	75kW	22U		FTB9900-300-1125	1125A	90kW	22U
Voltage	Model	Current	Power	Size	Volatage	Model	Current	Power	Size
500V	FTB9060-500-40	40A	6kW	3U	800V	FTB9060-800-25	25A	6kW	3U
	FTB9120-500-80	80A	12kW	3U		FTB9120-800-50	50A	12kW	3U
	FTB9180-500-120	120A	18kW	3U		FTB9180-800-75	75A	18kW	3U
	FTB9360-500-240	240A	36kW	6U		FTB9360-800-150	150A	36kW	6U
	FTB9540-500-360	360A	54kW	16U		FTB9540-800-225	225A	54kW	16U
	FTB9720-500-480	480A	72kW	16U		FTB9720-800-300	300A	72kW	16U
	FTB9900-500-600	600A	90kW	22U		FTB9900-800-375	375A	90kW	22U
Voltage	Model	Current	Power	Size	Volatage	Model	Current	Power	Size
1000V	FTB9120-1000-40	40A	12kW	3U	1500V	FTB9120-1500-25	25A	12kW	3U
	FTB9240-1000-80	80A	24kW	6U		FTB9180-1500-40	40A	18kW	3U
	FTB9360-1000-120	120A	36kW	16U		FTB9360-1500-80	80A	36kW	6U
	FTB9480-1000-160	160A	48kW	16U		FTB9540-1500-120	120A	54kW	16U
	FTB9600-1000-200	200A	60kW	22U		FTB9720-1500-160	160A	72kW	16U
Voltage	Model	Current	Power	Size	Volatage	Model	Current	Power	Size
2250V	FTB9180-2250-25	25A	18kW	3U	2250V	FTB9720-2250-100	100A	72kW	16U
	FTB9360-2250-50	50A	36kW	6U		FTB9900-2250-125	125A	90kW	22U
	FTB9540-2250-75	75A	54kW	16U		FTB91080-2250-150	150A	108kW	22U

Size chart

5kW~18kW Model size drawing



20kW~36kW Model size drawing



purchase on selection

Optional1

name	Model or Specification	Instruction
Computer graphical operating software	FTB9000 FaithPower	FTB9000 software
GPIBinterface	suffixG	
CAN+485interface	suffixR	
Composite signal port	suffixF	

Optional2 Selection table of high current test cable

Wire specifications	DC2-2P15M	DC16-2P15M	DC25-2P20M	DC50-2P20M	MDC50-2P40M	MDC120-2P20M	DC150-2P20M
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
shape							

Optional3 Ac input cable selection list

Wire specifications	AC6-3P20M	AC6-4P20M	AC6-4P40M	AC16-4P20M	AC16-4P20M	AC35-4P30M
Corresponding model	Single phase 6 .5kW	3- phase15kW	3- phase15kW	3- phase20k- 30kW	3- phase20k- 30kW	3- phase35k- 60kW
terminal	OmodelM4 /No	OmodelM4 /No	OmodelM4 /No	OmodelM5 /No	OmodelM4 /No	OmodelM8 /No
length	About 2m	About 2m	About 4m	About 2m	About 4m	About 3m

[General spec table](#)

Items	Parameters
AC INPUT	Three-phase input, 340VAC~480VAC , frequency 47Hz~63Hz
PF	0.99(Typical values)
EFFICIENCY	>93% (Typical values)
OUTPUT VOLTAGE	0~rated (Max rating 2250V, menu Settings, numeric or coded knob input)
OUTPUT CURRENT	0~rated (Max rating 10000A, menu Settings, numeric or coded knob input)
OUTPUT POWER	0~rated (Max rating 180KW, menu Settings, numeric or coded knob input)
Voltage accuracy	0.05%+0.05%F.S.
Current accuracy	0.1%+0.1%F.S.
Voltage current monitoring	Voltage/Current Monitors the output voltage: DC 0~5V
Display interface	4.3-inch TFT color LCD screen, supporting simplified Chinese, traditional Chinese and English
Operate interface	Function keys, digital keys and knobs (double knobs set voltage and current respectively) less than 2ms for the voltage of the equipment to recover the accuracy range of 0.75% of the rated value when the load changes from
transient response	10% to 90%
parallel	Supports MAX 10 parallel master and slave of the same model
PROTECTION	OV, OC OP over temperature, under voltage, etc
Communication interface	LAN, USB serial port (OPTIONAL GPIB, CAN, RS485)
Communication protocol	SCPI, MODBUS, CAN - Open PROTOCOL
Working temperature	0°C~40°C
Storage temperature	-20°C~70°C
altitude	<2000m
cooling way	intelligent air cool control

Electrical Specification Table -1 *More specifications and models are not listed one by one.

Model	FTB9050-80-150	FTB9060-300-75	FTB9060-500-40	FTB9060-800-25
Power	- 5~5kW	- 6~6kW	- 6~6kW	- 6~6kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-150~150A	-75~75A	-40~40A	-25~25A
Resistance	0.02~106Ω	0.3~800Ω	0.5~2.5kΩ	1.2~6kΩ
Model	FTB9100-80-300	FTB9120-300-150	FTB9120-500-80	FTB9120-800-50
Power	- 10~10kW	- 12~12kW	- 12~12kW	- 12~12kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-300~300A	-150~150A	-80~80A	-50~50A
Resistance	0.01~50Ω	0.15~400Ω	0.25~1.25kΩ	0.6~3kΩ
Model	FTB9150-80-450	FTB9180-300-225	FTB9180-500-120	FTB9180-800-75
Power	- 15~15kW	- 18~18kW	- 18~18kW	- 18~18kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-450~450A	-225~225A	-120~120A	-75~75A
Resistance	0.006~35Ω	0.1~266Ω	0.16~833Ω	0.4~2kΩ
Model	FTB9300-80-900	FTB9360-300-450	FTB9360-500-240	FTB9360-800-150
Power	- 30~30kW	- 36~36kW	- 36~36kW	- 36~36kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-900~900 A	-450~450A	-240~240A	-150~150A
Resistance	0.003~17Ω	0.05~133Ω	0.08~416Ω	0.2~1kΩ
Model	FTB9450-80-1350	FTB9540-300-675	FTB9540-500-360	FTB9540-800-215
Power	- 45~45kW	- 54~54kW	- 54~54kW	- 54~54kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-1350~1350 A	-675~675A	-360~360A	-215~215A
Resistance	0.002~11Ω	0.03~88Ω	0.05~277Ω	0.1~666Ω
Model	FTB9600-80-1800	FTB9720-300-900	FTB9720-500-480	FTB9720-800-300
Power	- 60~60kW	- 72~72kW	- 72~72kW	- 72~72kW
Voltage	0~80V	0~300V	0~500V	0~800V
Current	-1800~1800 A	-900~900A	-480~480A	-300~300A
Resistance	0.002~8.8Ω	0.025~66Ω	0.042~208Ω	0.1~500Ω
Voltage programming①				
Resolution	16bits			
Accuracy	0.05%+0.05%F. S.			
Current programming①				
Resolution	16bits			
Accuracy	0.1%+0.1% F. S.			
Resistance programming①				
Resolution	0.001Ω			
Accuracy	1%+0.5%I. F. S.			
Power programming①				
Resolution	1W			
Accuracy	0.5%F. S.			
External analog programming				
control voltage	0~5V 对应 0~100%F. S.			
Voltage accuracy	0.5%F. S.			
Current accuracy	0.5%F. S.			
linear adjustment ②				
Voltage	0.01%F. S.			
Current	0.05%F. S.			
Power	0.05%F. S.			
Load adjustment③				
Voltage	0.02%F. S.			
Current	0.1%F. S.			
Power	0.75%F. S.			
Voltage measurement①				
Resolution	16bits			
Accuracy	0.05%+0.05%F. S.			
Current measurement①				
Resolution	16bits			
Accuracy	0.1%+0.1% F. S.			
Resistance measurement				
Resolution	0.001Ω			
Accuracy	1%+0.5%I. F. S.			
Power measurement①				
Resolution	1W			
Accuracy	0.5%F. S.			
Output noise&ripple④				
Voltage ripple Vpp	5kW OR 6kW	160mV	300mV	450mV
	10kW OR 12kW	320mV	300mV	450mV
	15kW OR 18kW	320mV	300mV	450mV
Voltage ripple rms	5kW OR 6kW	16mV	40mV	70mV
	10kW OR 12kW	25mV	40mV	70mV
	15kW OR 18kW	25mV	40mV	70mV
Voltage rise slope				
Maximum slope				
Voltage drop time	10000V / s		40000V / s	
no-load				
full-load	<5s		<10s	
Size (WxHxD)	≤30ms			
Weight	5kW~18kW: 482.6mm x 132.5mm x 740.0mm, Includes output shield			
	5kW≈18kg, 10kW≈25kg, 15kW≈32kg			

Electrical Specification Table -1 *More specifications and models are not listed one by one.

Power	- 75~75kW	- 90~90kW	- 90~90kW	- 90~90kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-2250~2250 A	-1125~1125A	-600~600A	-375~375A	
Resistance	0.002~9Ω	0.02~53Ω	0.033~166Ω	0.08~400Ω	
Model	FTB9900-80-2700	FTB91080-300-1350	FTB91080-500-720	FTB91080-800-450	
Power	- 90~90kW	- 108~108kW	- 108~108kW	- 108~108kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-2700~2700 A	-1350~1350A	-720~720A	-450~450A	
Resistance	0.001~6Ω	0.017~44Ω	0.027~138Ω	0.066~333Ω	
Model	FTB91050-80-3150	FTB91260-300-1575	FTB91260-500-840	FTB91260-800-525	
Power	- 105~105kW	- 126~126kW	- 126~126kW	- 126~126kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-3150~3150	-1575~1575A	-840~840A	-525~525A	
Resistance	0.001~4.4Ω	0.014~38Ω	0.024~119Ω	0.057~285Ω	
Model	FTB91200-80-3600	FTB91440-300-1800	FTB91440-500-960	FTB91440-800-600	
Power	- 120~120kW	- 144~144kW	- 144~144kW	- 144~144kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-3600~3600A	-1800~1800A	-960~960A	-600~600A	
Resistance	0.001~4.4Ω	0.013~33Ω	0.021~104Ω	0.05~250Ω	
Model	FTB91350-80-4050	FTB91620-300-2025	FTB91620-500-1080	FTB91620-800-675	
Power	- 135~135kW	- 162~162kW	- 162~162kW	- 162~162kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-4050~4050A	-2025~2025A	-1080~1080A	-675~675A	
Resistance	0.001~3.9Ω	0.011~30Ω	0.018~92Ω	0.044~222Ω	
Model	FTB91500-80-4500	FTB91800-300-2250	FTB91800-500-1200	FTB91800-800-750	
Power	- 150~150kW	- 180~180kW	- 180~180kW	- 180~180kW	
Voltage	0~80V	0~300V	0~500V	0~800V	
Current	-4500~4500A	-2250~2250A	-1200~1200A	-750~750A	
Resistance	0.001~3.5Ω	0.01~26Ω	0.017~83Ω	0.04~200Ω	
Voltage programming①					
Resolution	16bits				
Accuracy	0.05%+0.05%F. S.				
Current programming①					
Resolution	16bits				
Accuracy	0.1%+0.1% F. S.				
Resistance programming①					
Resolution	0.001Ω				
Accuracy	1%+0.5%I. F. S.				
Power programming①					
Resolution	1W				
Accuracy	0.5%F. S.				
External analog programming					
control voltage	0~5V 对应 0~100%F. S.				
Voltage accuracy	0.5%F. S.				
Current accuracy	0.5%F. S.				
linear adjustment ②					
Voltage	0.01%F. S.				
Current	0.05%F. S.				
Power	0.05%F. S.				
Load adjustment③					
Voltage	0.02%F. S.				
Current	0.1%F. S.				
Power	0.75%F. S.				
Voltage measurement①					
Resolution	16bits				
Accuracy	0.05%+0.05%F. S.				
Current measurement①					
Resolution	16bits				
Accuracy	0.1%+0.1% F. S.				
Resistance measurement					
Resolution	0.001Ω				
Accuracy	1%+0.5%I. F. S.				
Power measurement①					
Resolution	1W				
Accuracy	0.5%F. S.				
Output noise & ripple④					
Voltage ripple Vpp	5kW 或 6kW	160mV	300mV	450mV	800mV
	10kW 或 12kW	320mV	300mV	450mV	800mV
	15kW 或 18kW	320mV	300mV	450mV	800mV
Voltage ripple rms	5kW 或 6kW	16mV	40mV	70mV	200mV
	10kW 或 12kW	25mV	40mV	70mV	200mV
	15kW 或 18kW	25mV	40mV	70mV	200mV
Maximum slope					
no-load	10000V / s		40000V / s		
Voltage drop time					
full-load	<5s		<10s		
no-load	<30ms				
Size (WxHxD)	5kW~18kW: 482.6mm x 132.5mm x 740.0mm, Includes output shield				
Weight	5kW≈18kg, 10kW≈25kg, 15kW≈32kg				

Power	-12~12kW	- 12~12kW	~
Voltage	0~1000V	0~1500V	~
Current	-40~40A	-25~25A	~
Resistance	1~5k Ω	2 . 25~11k Ω	~
Model	~	FTB9180-1500-40	FTB9180-2250-25
Power	~	- 18~18kW	-18~18kW
Voltage	~	0~1500V	0~2250V
Current	~	-40~40A	-25~25A
Resistance	~	1 . 5~7 . 5k Ω	3 . 6~18k
Model	FTB9240-1000-80	FTB9360-1500-80	FTB9360-2250-50
Power	-24~24kW	- 36~36kW	-36~36kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-80~80A	-80~80A	-50~50A
Resistance	0 . 5~2 . 5 k Ω	0 . 75~7 . 5k Ω	1 . 8~9k Ω
Model	FTB9360-1000-120	FTB9540-1500-120	FTB9540-2250-75
Power	-36~36kW	- 54~54kW	-54~54kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-120~120A	-120~120A	-75~75A
Resistance	0 . 33~1 . 6k Ω	0 . 5~2 . 5k Ω	1 . 2~6k Ω
Model	FTB9480-1000-160	FTB9720-1500-160	FTB9720-2250-100
Power	-48~48kW	- 72~72kW	-72~72kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-160~160A	-160~160A	-100~100A
Resistance	0 . 25~1 . 25k Ω	0 . 375~1 . 875k Ω	0 . 9~4 . 5k Ω
Voltage programming ^①			
Resolution	16bits		
Accuracy	0.05%+0.05%F. S.		
Current programming ^①			
Resolution	16bits		
Accuracy	0.1%+0.1% F. S.		
Resistance programming ^①			
Resolution	0.001 Ω		
Accuracy	1%+0.5%I. F. S.		
Power programming ^①			
Resolution	1W		
Accuracy	1%F. S.		
External analog programming			
control voltage	0~5V 对应 0~100%F. S.		
Voltage accuracy	0.5%F. S.		
Current accuracy	0.5%F. S.		
linear adjustment ^②			
Voltage	0.01%F. S.		
Current	0.05%F. S.		
Power	0.05%F. S.		
Load adjustment ^③			
Voltage	0.02%F. S.		
Current	0.05%F. S.		
Power	0.05%F. S.		
Voltage measurement ^①			
Resolution	16bits		
Accuracy	0.05%+0.05%F. S.		
Current measurement ^①			
Resolution	16bits		
Accuracy	0.1%+0.1% F. S.		
Resistance measurement			
Resolution	0.001 Ω		
Accuracy	1%+0.5%I. F. S.		
Power measurement ^①			
Accuracy	1%F. S.		
Output noise & ripple ^④			
Voltage ripple Vpp	12kW 18kW	1600mV -	- 2400mV 3600mV
Voltage ripple rms	12kW 18kW	350mV -	- 400mV 400mV
Voltage rise slope			
Maximum slope	40000V/ s		
Voltage drop time			
no-load	<10s		
full-load	≤30ms		
Size (WxHxD)	5kW~18kW: 482 . 6mm x 132.5mm x 740 . 0mm Includes output shield		
Weight	5kW≈18kg, 10kW≈25kg, 15kW≈32kg		

Electrical Specification Table -2 *More specifications and models are not listed one by one.

Model	FTB9600-1000-200	FTB9900-1500-200	FTB9900-2250-125
Power	-60~60kW	-90~90kW	-90~90kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-200~200A	-200~200A	-125~125A
Resistance	0.2~1kΩ	0.3~1.5kΩ	0.72~3.6kΩ
Model	FTB9720-1000-240	FTB91080-1500-240	FTB91080-2250-150
Power	-72~72kW	-108~108kW	-108~108kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-240~240A	-240~240A	-150~150A
Resistance	0.166~250Ω	0.25~1.25kΩ	0.6~3kΩ
Model	FTB9840-1000-280	FTB91260-1500-280	FTB91260-2250-175
Power	-84~84kW	-126~126kW	-126~126kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-280~280A	-280~280A	-175~175A
Resistance	0.143~714Ω	0.214~1.07kΩ	0.514~2.5kΩ
Model	FTB9960-1000-320	FTB91440-1500-320	FTB91440-2250-200
Power	-96~96kW	-144~144kW	-144~144kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-320~320A	-320~320A	-200~200A
Resistance	0.125~625Ω	0.188~938Ω	0.45~2.25kΩ
Model	FTB91080-1000-360	FTB91620-1500-360	FTB91620-2250-225
Power	-108~108kW	-162~162kW	-162~162kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-360~360A	-360~360A	-225~225A
Resistance	0.11~555Ω	0.167~833Ω	0.4~2kΩ
Model	FTB91200-1000-400	FTB91800-1500-400	FTB91800-2250-250
Power	-120~120kW	-180~180kW	-180~180kW
Voltage	0~1000V	0~1500V	0~2250V
Current	-400~400A	-400~400A	-250~250A
Resistance	0.1~500Ω	0.15~750Ω	0.36~1.8kΩ
Voltage programming①			
Resolution	16bits		
Accuracy	0.05%+0.05%F.S.		
Current programming①			
Resolution	16bits		
Accuracy	0.1%+0.1% F.S.		
Resistance programming①			
Resolution	0.001Ω		
Accuracy	1%+0.5%I.F.S.		
Power programming①			
Resolution	1W		
Accuracy	1%F.S.		
External analog programming			
control voltage	0~5V 对应 0~100%F.S.		
Voltage accuracy	0.5%F.S.		
Current accuracy	0.5%F.S.		
linear adjustment ②			
Voltage	0.01%F.S.		
Current	0.05%F.S.		
Power	0.05%F.S.		
Load adjustment③			
Voltage	0.02%F.S.		
Current	0.05%F.S.		
Power	0.05%F.S.		
Voltage measurement①			
Resolution	16bits		
Accuracy	0.05%+0.05%F.S.		
Current measurement①			
Resolution	16bits		
Accuracy	0.1%+0.1% F.S.		
Resistance measurement			
Resolution	0.001Ω		
Accuracy	1%+0.5%I.F.S.		
Power measurement①			
Accuracy	1%F.S.		
Output noise & ripple④			
Voltage ripple Vpp	12kW	1600mV	-
	18kW	-	2400mV
Voltage ripple rms	12kW	350mV	-
	18kW	-	400mV
Voltage rise slope			
Maximum slope	40000V/ s		
Voltage drop time			
no-load	<10s		
full-load	≤30ms		
Size (WxHxD)	5kW~18kW: 482.6mm x 132.5mm x 740.0mm Includes output shield		
Weight	5kW≈18kg, 10kW≈25kg, 15kW≈32kg		

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