

FTGK Series Super power Industrial programmable DC source

Product



Features :

- Stand-alone range :
Voltage : 0 ~ 1000V ; current : 0 ~ 6000A ; power : 20 ~ 1800kW
- Constant voltage, constant current output ;
- High reliability (can work stably for a long time) ;
- High environmental adaptability (high and low temperature and humidity resistance, dust resistance) ;
- Small electromagnetic interference ;
- Sequence function, realize voltage and current waveform output ;
- high power density, 4U/20kW, 4U/30kW, wide range output (0 ~ 1000V) current (0 ~ 100A) ;
- Supports voltage and current monitoring output ;
- Analog programming function ;
- Composite signal port (optional) ;
- Monitor output function ;
- standard USB Serial port, LAN, optional RS485, GPIB, CAN,
- Standard SCPI and Modbus-RTU instructions, convenient to set up intelligent test platform and secondary development ;
- Modules are stacked and combined for easy installation and maintenance ;
- OV/OC/OP/OT comprehensive intelligent protection function ;
- TFT color LCD screen, support Chinese and English display ;
- Intelligent fan control, improve the service life of the whole machine.

Application

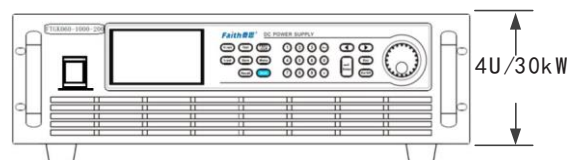
- Testing in the solar energy field ;
- Testing in the semiconductor field ;
- Simulation of charging and power supply environment ;
- Sensors, superconducting materials, cables and other products ;
Fuel cells, power batteries, lead storage batteries, supercapacitors
- Drones, lasers, sensors testing field ;
- Test server power supplies, UPS, and inverters ;

FTGK series ultra-large power industrial programmable DC power supply, widely used in high-quality DC power supply industry scenarios, with high reliability (can work stably for a long time), high environmental adaptability (resistance to high and low temperature and humidity, dust resistance), low electromagnetic interference (small interference to the grid) and other notable features.

FTGK series power supply is suitable for DC power supply in various industrial or on-site environments, including industrial production (such as vapor deposition, ion deposition, vacuum coating, electrolytic hydrogen production); Electronic products aging test (such as compressor, vehicle equipment, inverter, DC); On-site charging and replenishment support (such as airport, station, wharf); Dc lighting power supply, etc.

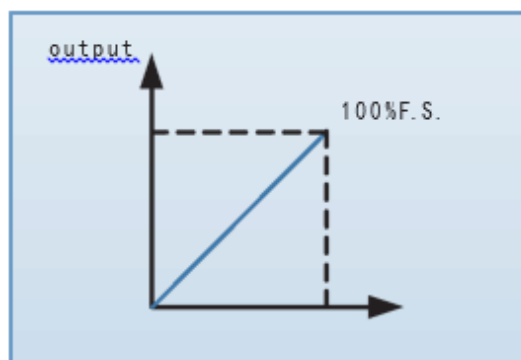
4U/30kW High power density

The FTGK series provides a high power density of 4U/30kW with precise output and low ripple noise. wide range of voltage 0V ~ 1000V, current 100A ~ 6000A combination,



Analog programming function

FTGK series has two analog input ports, voltage programming and current programming, which can respectively control the output voltage and output current. Analog programming signals use 0 ~ 5V DC voltage signals. The programmed signal corresponds to the voltage and output current of the 0 ~ 100%F.S. output range.



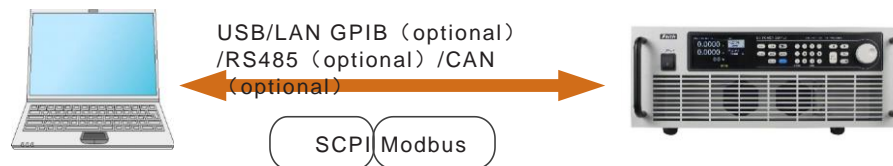
5V input

Sequential function

FTGK series power supply has sequence output function, users can edit complex voltage and current waveform according to actual needs. Support 10 sequence files, each file 100 steps, support cycle, link, convenient to achieve complex waveform output.

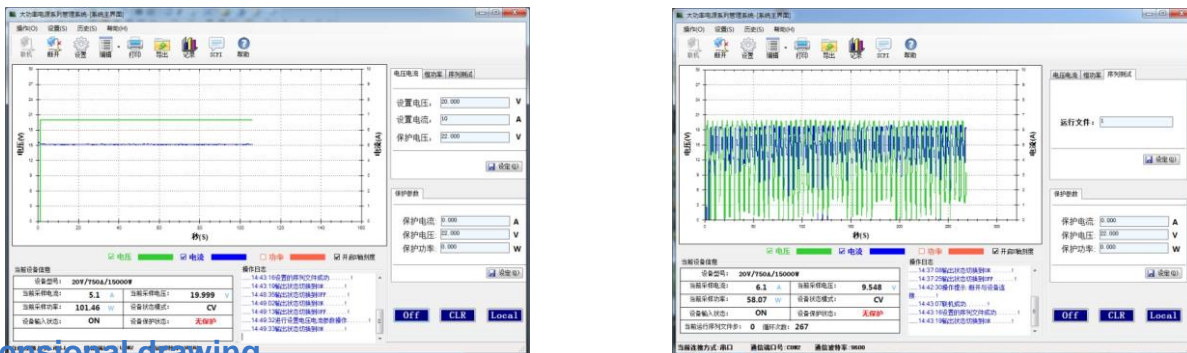
Multi-interface and multi-protocol

The FTGK series is equipped with multiple communication interfaces and supports both SCPI and Modbus communication protocols. Users can configure the system on the menu according to the requirements, which makes the system integration more flexible.



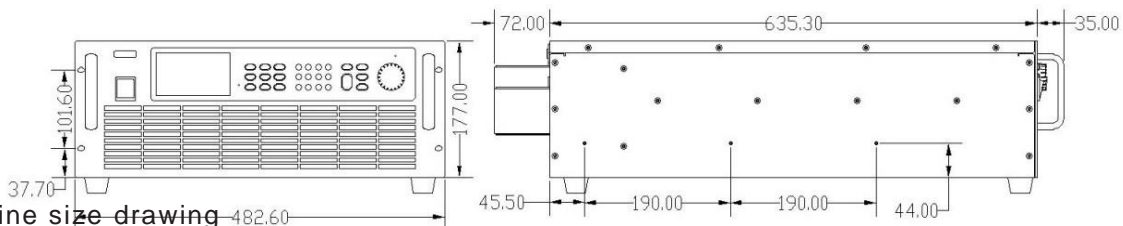
Computer graphical operation software

FTGK 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

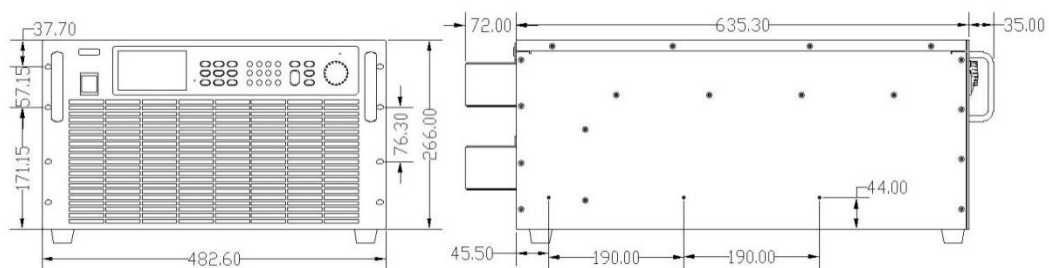


Dimensional drawing

30kW Machine size drawing



60kW Machine size drawing



Optional information

Optional parts 1

Name	Model and Spec	Instruction
Computer graphical operation software	FTGK Faith Power	FTGK software on the upper computer
GPIB interface	Suffix G	
CAN, RS485 interface	Suffix R	
Combined signal port	Suffix F	
Battery load anti - irrigation device	Suffix D	

Optional parts 2 High current test cable optional table

Wire spec	DC2-2P15M	DC16-2P15M	DC25-2P20M	DC50-2P20M	DC50-2P40M	DC120-2P20M	DC150-2P20M
Max voltage	750V						
Max current	10A	60A	100A	200A	200A	300A	400A
terminal	M8/鳄鱼夹	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							

General specification table

Project	Parameter
AC input	300VAC~450VAC, frequency 50Hz~60Hz
Output voltage	0~Rated value
Output current	0~Rated value
Output PF	0~Rated value
PF	0.98(Half load and above)
efficiency	>95% (typical)
Voltage rise time (no load)	≤2.5s
Voltage drop time (no load)	≤10s
Parallel operation	Support 10 of the same model master, slave machine expansion
protection	Over voltage, over current, over power, over temperature, under voltage, etc
Communication interface	LAN、USB Serial port (optional GPIB、CAN、RS485)
Communication protocol	SCPI、MODBUS、CAN-Open Protocol
Display interface	4.3-inch TFT color LCD screen, supporting simplified Chinese, traditional Chinese and English display
Operating interface	Function keys, number keys and knobs
Working temperature	0°C~40°C
Storage temperature	-20°C~70°C
Using altitude	<2000m
Heat dissipation mode	Air cooling, intelligent fan control

Electrical specifications :

Model	FTGK200-750-50		FTGK300-1000-100		FTGK400-750-100	
Voltage	0~750V		0~1000V		0~750V	
current	0~50A		0~100A		0~100A	
Rang	0~500V/0~50A	0~750V0~30A	0~500V/0~100A	0~1000V/0~50A	0~500V/0~100A	0~750V/0~60A
Power	0~20kW		0~30kW		0~40kW	
Model	FTGK600-1000-200		FTGK900-1000-300		FTGK1200-1000-400	
Voltage	0~1000V		0~1000V		0~1000V	
current	0~200A		0~300A		0~400A	
Rang	0~500V/0~200A	0~1000V/0~100A	0~500V/0~300A	0~1000V/0~150A	0~500V/0~400A	0 ~ 1000V/0 ~ 200A
Power	0~60kW		0~90kW		0~120kW	
Model	FTGK1500-1000-500		FTGK1800-1000-600		FTGK2100-1000-700	
Voltage	0~1000V		0~1000V		0~1000V	
current	0~500A		0~600A		0~700A	
Rang	0~500V/0~500A	0~1000V0~250A	0~500V/0~600A	0~1000V/0~300A	0~500V/0~700A	A 0 ~ 1000V/0 ~ 350A
Power	0~150kW		0~180kW		0~210kW	
Model	FTGK2400-1000-800		FTGK2700-1000-900		FTGK3000-1000-1000	
Voltage	0~1000V		0~1000V		0~1000V	
current	0~800A		0~900A		0~1000A	
Rang	0~500V/0~800A	0~1000V/0~400A	0~500V/0~900A	0~1000V/0~450A	0 ~ 500V/0 ~ 1000A	0 ~ 1000V/0 ~ 500A
Power	0~240kW		0~270kW		0~300kW	
Model	FTGK3300-1000-1100		FTGK3600-1000-1200		FTGK3900-1000-1300	
Voltage	0~1000V		0~1000V		0~1000V	
current	0~1100A		0~1200A		0~1300A	
Rang	0~500V/0~1100A	0~1000V/0~550A	0~500V/0~1200A	0~1000V/0~600A	0 ~ 500V/0 ~ 1300A	0 ~ 1000V/0 ~ 650A
Power	0~330kW		0~360kW		0~390kW	
Model	FTGK4200-1000-1400					
Voltage	0~1000V					
current	0~1400A					
Rang	0~500V/0~1400A	0~1000V/0~700A				
Power	0~420kW					

Voltage programming of the ①

accuracy 0.1%+0.4%F.S.(Steady voltage state, input voltage 325 Vac ~ 450 Vac, output voltage 10%~100% F.S.)

Current programming of the ①

accuracy 0.5%+0.5% F.S.

External simulation programming of ①

control voltage 0~ 5 V corresponds to 0~ 100% F.S.

voltage accuracy 1.0%F.S.

Current accuracy 1.0%F.S.

Linear adjustment rate of ②

voltage 0.1%+0.1%F.S.

current 0.1%+0.1%F.S.

load regulation ③

voltage 0.3%F.S.

current 0.3%F.S.

voltage measurement ①

accuracy 0.1%+0.4%F.S.(Steady voltage state, input voltage 325 Vac ~ 450 Vac, output voltage 10%~100% F.S.)

electric current measurement ①	
accuracy	0.5%+0.5% F.S .
Output noise & ripple of ④	
Voltage ripple	≤1%F.S .(Steady voltage state, input voltage 325 Vac ~ 450 Vac, output voltage 20%~100% F.S ., Output current 0~ rated current value
size	20 / 30kW: (WxHxD) 482.6mm x 177.0mm x 742.0mm, including the 40 / 60kW: (WxHxD) 482.6mm x 266.0mm x 742.0mm, including the output shield
weight	20kW ≈20kg , 30kW ≈25kg , 40kW ≈30kg