

<https://www.faithtechate.com/>

**Faith**  
Technologies

**SHENZHEN FAITHTECH CO., LTD.**

### About Faith

Shenzhen Faithtech Co., Ltd., founded in 2002, is a world-leading manufacturer of power electronics test equipment, committed to providing the electronics, power, and scientific research industries with precise and reliable power electronics test equipment that can replace imported products.

Faith is a 'National High-tech Enterprise', 'Shenzhen High-tech Enterprise', 'Shenzhen Specialized, Refined, Innovative, and New Enterprises', and 'Shenzhen Software Enterprise'.

Adhering to the principle of "creating world-class products and developing independent national brands," Faith has acquired more than 160 independent intellectual property rights. It has formed an integrated comprehensive operation system combining R&D, production, and marketing, and has successively passed ISO 9001:2000 international quality management system certification, CE, and ROHS certification.







Total employees in the company



Shenzhen employees



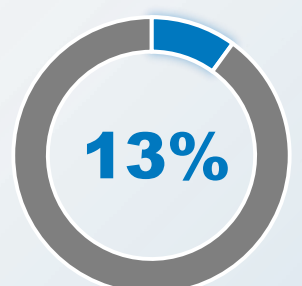
Changsha Branch



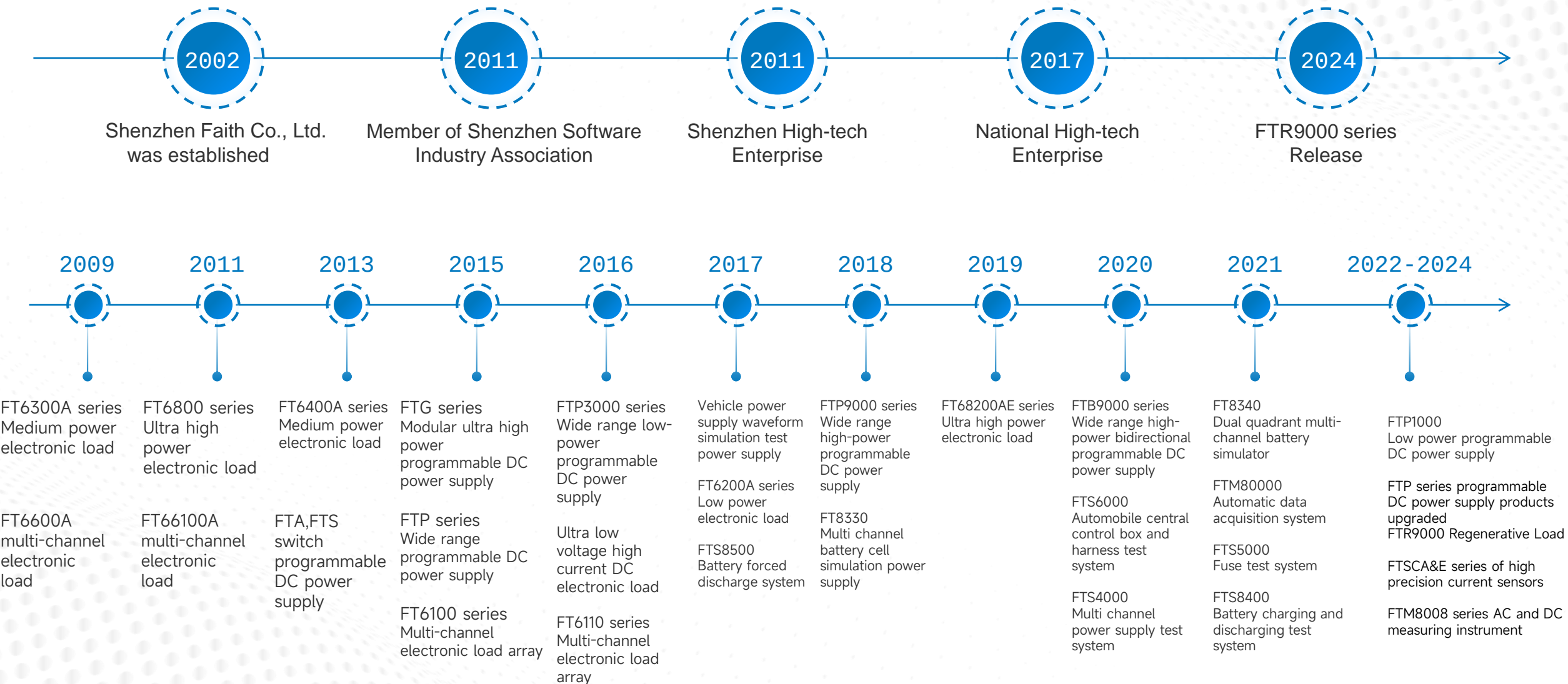
Representative office employees



R&D Engineer proportion

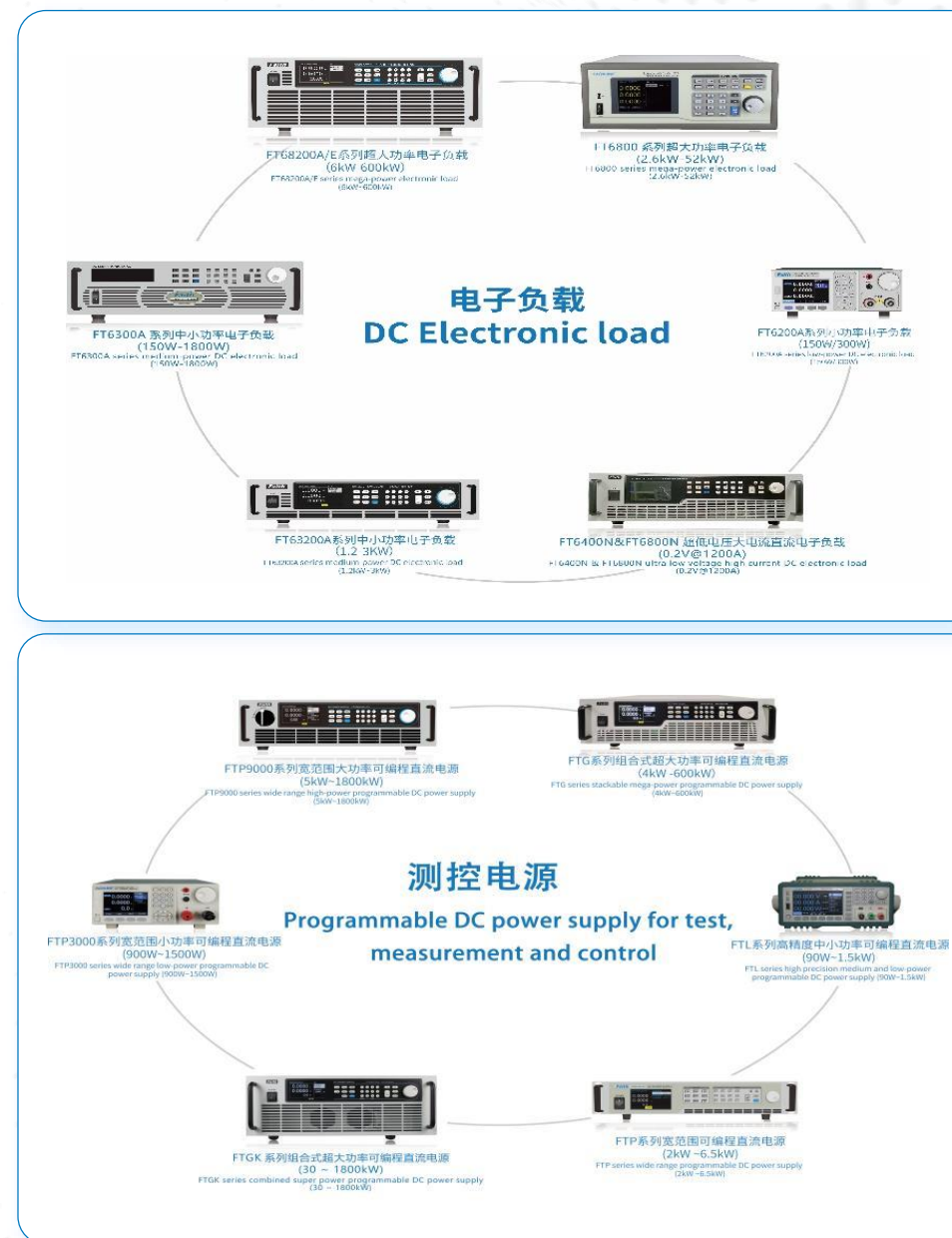


R&D expenditure as a percentage of revenue





## Overview of DC power supply & DC electronic load



## Bidirectional DC power supply



FTB9000 series wide range high power bidirectional DC power supply

### Product features

- Voltage: 0 ~ 2250V Current: 0 ~ ±4500A Power: 0 ~ ±180kW; Bidirectional energy transfer, seamless switching across quadrants
- Voltage accuracy: 0.02%+0.02%F.S.; Current accuracy: 0.1%+0.1%F.S.
- With charging, discharging function, sequence and waveform function, battery simulation function (optional), photovoltaic cell array simulation function (optional)

### Market application

- Energy storage, micro grid equipment production & development
- Aerospace, railway, new energy vehicle applications;
- Server power supply, UPS, inverter production, development

## 双向直流电源 Bidirectional DC power supply



FTB9000  
series

需要能量双向传递、无缝切换源载功能

Bidirectional energy transfer and seamless switching of primary load are required

需要电网能量回馈，节省能源

Need grid energy feedback, save energy

需要光伏曲线测试、电池模拟功能测试

Need PV curve test, battery simulation function test

需要仪器体积小、功率大、环境散热要求高

Small instrument size, large power and high environmental heat dissipation requirements are required

VS

## 独立电源/负载 Power/Load



FTP/FT63200  
series

只需单一电源功能或者负载功能

Only a single power supply function or load function is needed

需要高动态性能测试，负载uS级别

High dynamic performance testing is required, load uS level

需要复杂测试模式，CCD、复合测试模式

Need complex test mode, CCD, composite test mode

需要时间测量、瞬间过功率测试

Need time measurement, instantaneous overpower test

### High power full range programmable DC power supply

#### FTG series combined ultra power DC power

##### » Product Feature

- Voltage: 10-1500V; Current 0-20000A; Power: 4-600KW; AC input: 380VAC
- Low voltage to 10V, less power to provide more current, convenient, practical sequence function; it can realize various voltage, current waveform output. Capable of composite signal port with powerful signal monitoring (optional).



##### » Market Application

- Flexible application of multiple specifications in power electronics laboratory
- Fuel battery, power battery, lead battery, super capacitor test
- Testing of sensors, superconducting materials, cables, connectors and other products



### High power full range programmable DC power supply

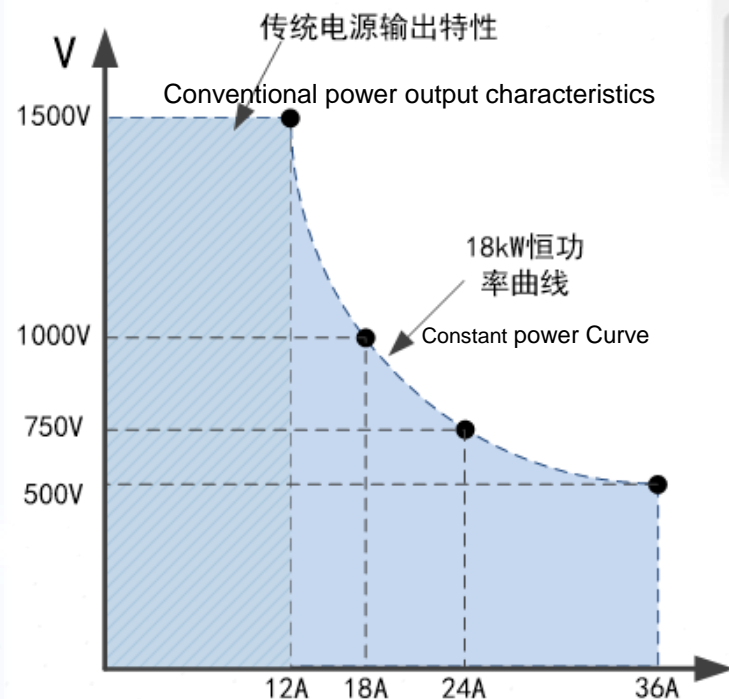
FTP9000 series wide range high power DC power supply

#### Product Feature

- Voltage: 80-2250V; Current: 0-6120A; Power: 5-180KW; AC input: 380VAC
- 3 times wide output range, voltage and current sampling rate 500kHz, resolution 16Bits
- The efficiency of the whole machine is higher than 93%, PFC control function, power factor 0.99
- Voltage output slow rise, slow drop function, voltage, current priority function

#### Market Application

- Simulation of power supply environment for on-board, airborne & shipboard electronic equipment
- Design and test for solar, wind & energy storage
- UAV, laser, sensor power supply & design testing





## Medium power full range programmable DC power supply

FTP series wide range DC power supply

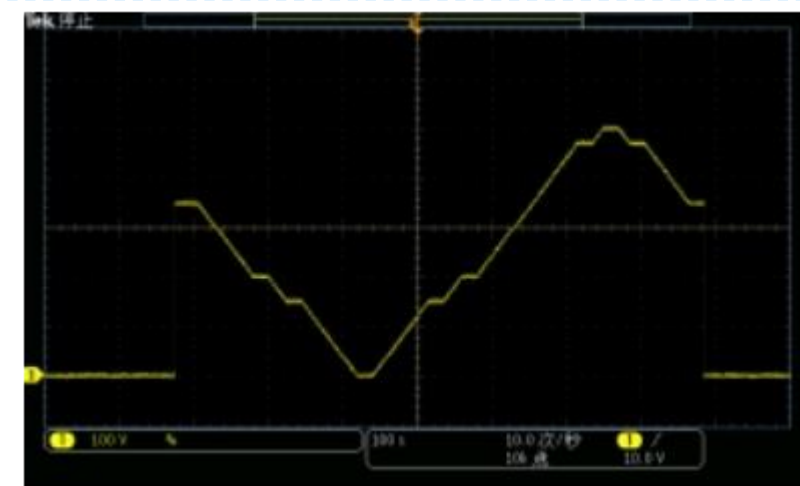
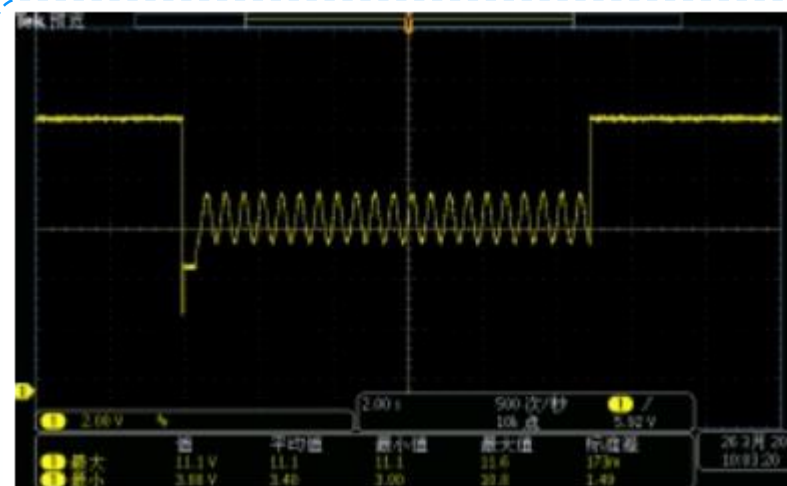
### Product Feature

- Voltage: 10-1500V; Current: 0-800A; Power: 1.2KW-6.5KW
- High stability: low linearity and load adjustment rate, low ripple, low noise
- Slope control: it can quickly and accurately control the voltage (or current) rise and fall
- Sequence function: Powerful and flexible sequence function, it can simulate complex waveform output



### Maket Application

- Laboratory tests
- Voltage and current sensor calibration
- On-board equipment testing
- Laser testing



## Low power programmable DC power supply



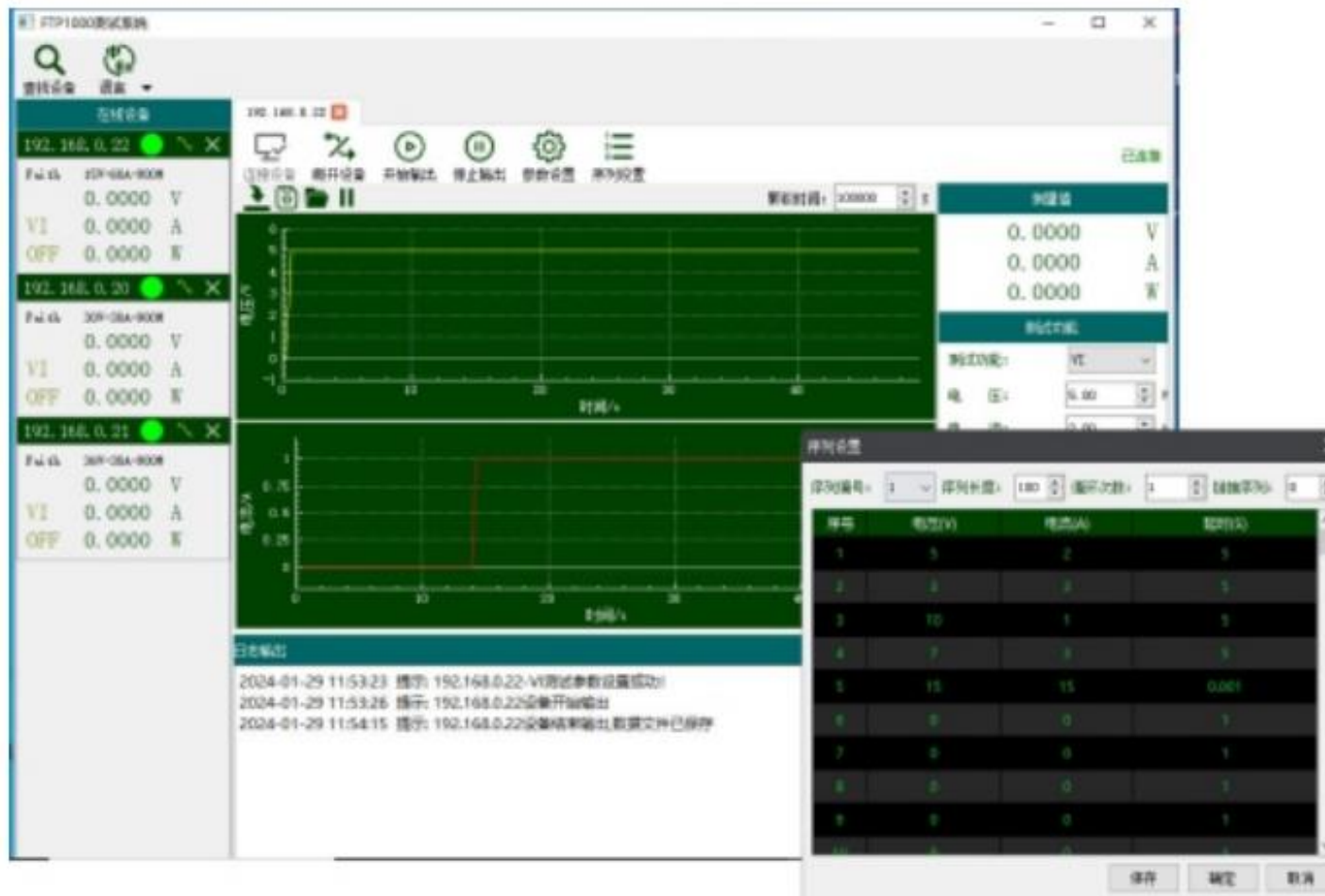
**FTP1000 series high precision medium and small power programmable DC power supply**

### Product Feature

- Voltage: 15 ~ 3000V Current: 0 ~ 120A Power: 600W ~ 1800W; Small size, 1U/ half 19 inches; Input high power factor, low harmonics Sequence and waveform editing function; With battery charging function
- Over voltage, over current, over power & over temperature protection and other comprehensive protection functions
- Support output time setting, can control and record the output time
- Remote voltage compensation is supported
- OLED display, wide viewing Angle, high brightness
- Standard RS232 and LAN, optional RS485
- Support standard SCPI and Modbus-RTU communication protocols

### Markte Application

Laboratory tests  
System integration  
Mass production line testing





	FTB9000	FTP9000	FTG	FTP	FTP1000
Power	5-180KW	5-180KW	4-600KW	1.6-6.5KW	600-1800W
Volt Range	80-2500V	80-2500V	10-1500V	10-1500V	15-3000V
Main Feature	Bidirectional energy transfer, seamless switching across quadrants	High power density, high efficiency, wide range	Single machine current up to 20000A	Wide range output, large current, adjustable voltage & current slope, analog automobile power supply waveform	Ultra high voltage, small volume, high power density
Main Market Application	Inverter test production Motor test Solar arrays, wind power applications	Dc charging pile Power supply environment simulation for vehicle-mounted, aircraft-mounted, and ship-mounted electronic equipment	Superconductive material Sensor testing Cable harness testing Fuel cell, power battery, super capacitor test	Solar energy, wind energy, energy storage field test Automobile power supply waveform simulation test Dc charger test system	System integration Mass production line testing Laboratory tests BMS System Test

## Low power full range programmable DC power supply

### FTP3000 series wide range DC power supply

#### Product Feature

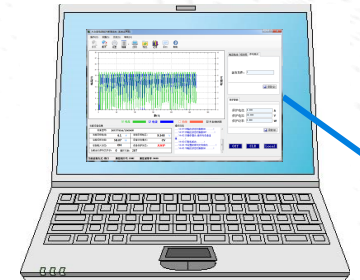
- Voltage: 0-600V; Current: 0-80A; Power: 900W、1500W
- 24-bit high-resolution ADC measurement
- The power factor is greater than 0.98
- Low ripple noise, remote line loss compensation
- Sequence function: powerful and flexible sequence function; it can simulate complex waveform output



RS232/LAN/CAN  
(Optional)

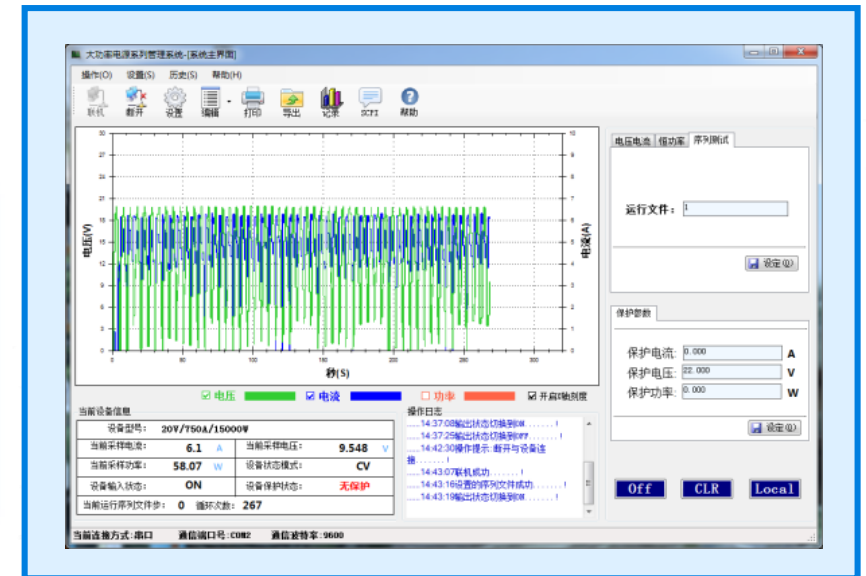
SCPI

Modbus



#### Market Application

Laboratory tests  
On-board equipment testing  
Battery charge test  
DC/DC testing





## Low power full range programmable DC power supply

### FTL series wide range DC power supply

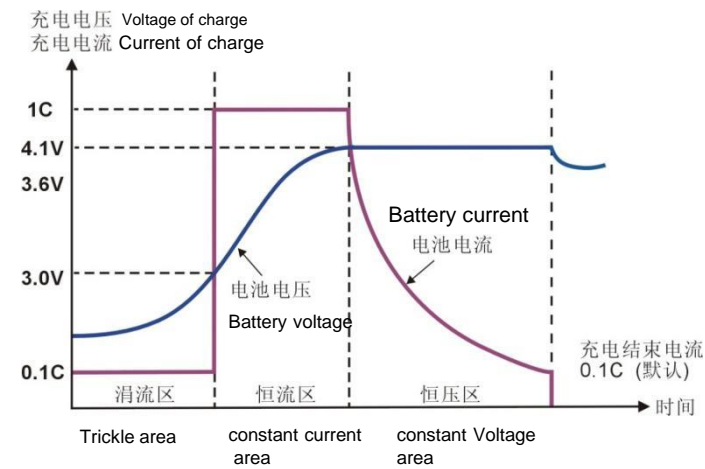
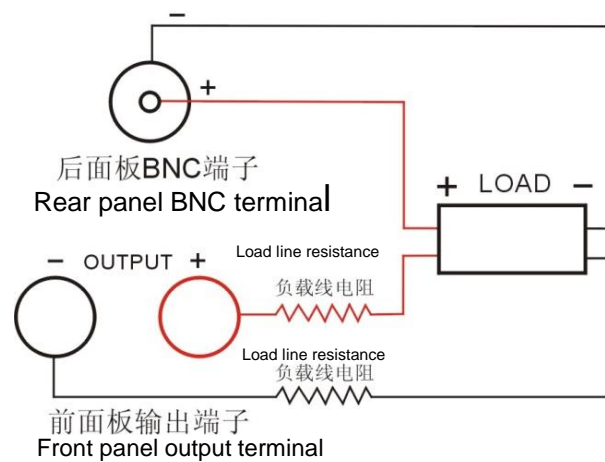
#### Product Feature

- Voltage: 15-500V; Current: 0-60A; Power: 90W-900W
- High stability: low linearity, load adjustment rate 1mVrms ripple and noise
- Sequence function: powerful and flexible sequence function, it can simulate complex waveform output



#### Market Application

- High-standard laboratory use
- High index laboratory use
- Vehicle mounted equipment
- High performance test system



### Multi-channel low power series programmable DC power supply

FTL multi-channel programmable linear DC power supply

#### » Product Feature

- Three channels simultaneously display voltage and current, all of which are adjustable.  
High stability: low linearity, load adjustment rate 1mVrms ripple and noise
- it can be used in series, parallel, or synchronized configurations.
- Voltage: 31-61V; Current: 3-6A; Power 90W-180W



#### » Market Application

- Production line workbench routine testing
- Automation equipment integration laboratory
- Institute of research



High power full range of programmable electronic load



FT68200A/E/AL series ultra-high-power electronic loads

## Product Feature

- Voltage: 150V/600V/1200V/1600V;  
Current: 0-2400A; Single Power: 4kW~60kW
- Current precision: 0.05%+0.05%F.S.  
Time measurement function, instantaneous 2 times overload function (within 3S)
- Automatic test function, sine wave load function, sequence function

## Market Application

- Power battery test
- Lithium battery test
- BM Stest
- Dc charging pile test
- High power switching power supply test
- Testing of current devices (relays, fuses, connectors)

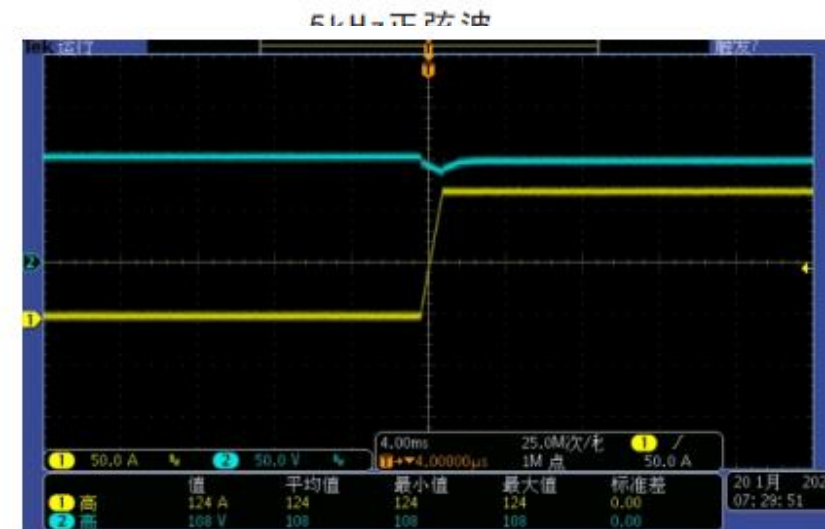
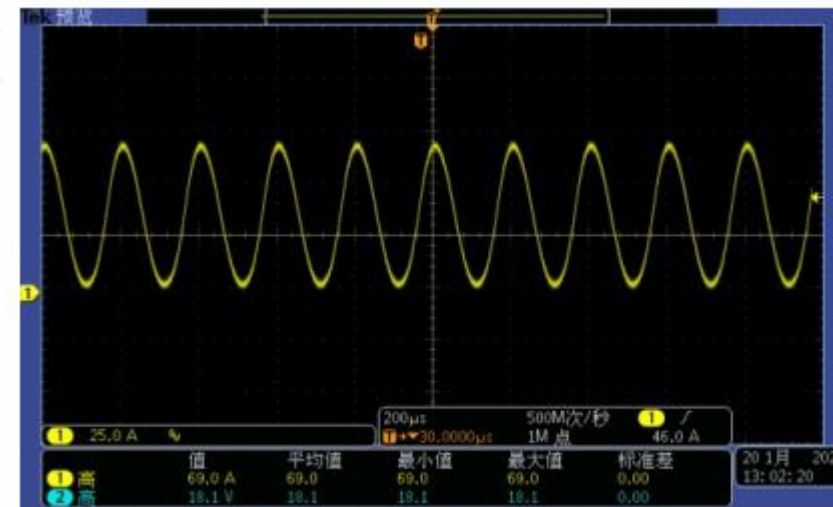


普通电子负载

VS



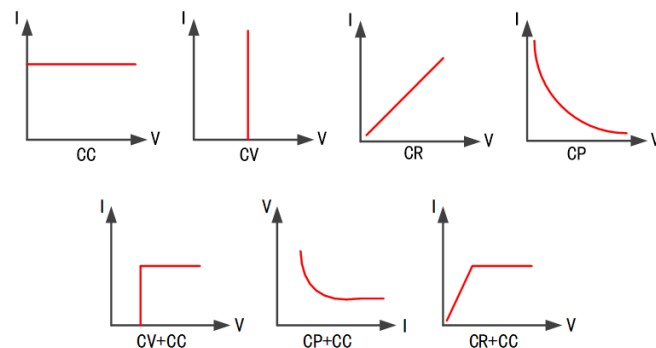
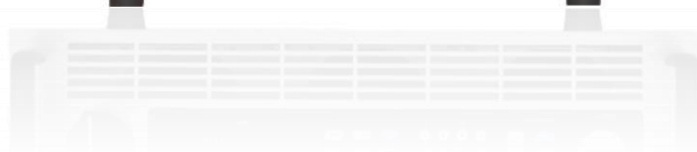
24kW/14U



FT68206E-150-600额定6kW，瞬间带载12kW

The FT68206E-150-600 is rated at 6kw and carries 12KW instantly

## Feedback programmable DC electronic load series



### Product Feature

- Voltage: 0 ~ 2250V, Current: 0 ~ 4500A, Power: 0 ~ 180kW
- Voltage precision: 0.05%+0.05%F.S., current precision: 0.1%+0.1%F.S.
- Power factor 0.99, the efficiency of the whole machine is higher than 93%
- With CC,CV,CP,CR,CV+CC,CP+CC,CR+CC multiple operation mode functions
- Comprehensive protection functions, including overvoltage, overcurrent, overpower, overtemperature, undervoltage, power failure, and islanding protection.
- Communication interface comes standard with LAN and USB, with optional RS485, CAN, or GPIB.
- The communication protocol supports SCPI, MODBUS, and CAN-OPEN (optional) protocols, and provides a host computer and SDK development kit for secondary development.

### Market Application

- New energy equipment testing
- Lithium ion, fuel and other battery discharge test
- Aerospace, railway, new energy vehicle applications



## High power single load product series

	FT6800	FT68200A/E/AL	FTR9000
Power Range	2.6-36 kW (4KW in increments above 12K	4 to 600 kW (In increments of 6KW above 12K )	5–180KW
Voltage Range	40/120/500/800/1000/1200V	150/600/1200V/1500V	80/300/500/800/1000/1500/2250V
Main Feature	High reliability and stability	High precision, high power density, powerful overload capability, rich test functions	Energy feedback grid, 3U/18KW,
Main Market Application	Communication power supply, OBC (3.3/6.6/11/20KW); Dc charging module (15/30KW), DC pile (120KW/240KW); Fuel cell, energy storage battery, power battery; Fuses.		Energy storage, microgrid equipment production and development; New energy vehicles, motor drive test; Fuel cell, energy storage battery, power battery; Automatic test system



Full range of low and medium power programmable electronic loads



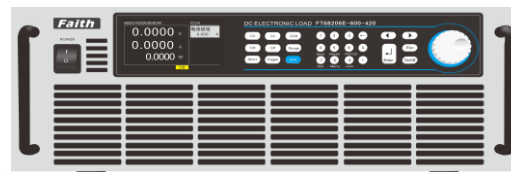
FT63200 series small and medium power electronic load

## Product Feature

- Voltage: 150V/600V/1200V; Current: 0-300A; Single-unit power: 600W to 3000W
- Current precision: 0.05%+0.05%F.S.
- Time measurement function, instantaneous 2x overload function
- Automatic testing function, sine wave load function, sequence function

## Market Application

- Lithium ion battery test
- BMS test
- Medium power switching power supply test
- Current devices (relays, fuses, connectors) test
- and others



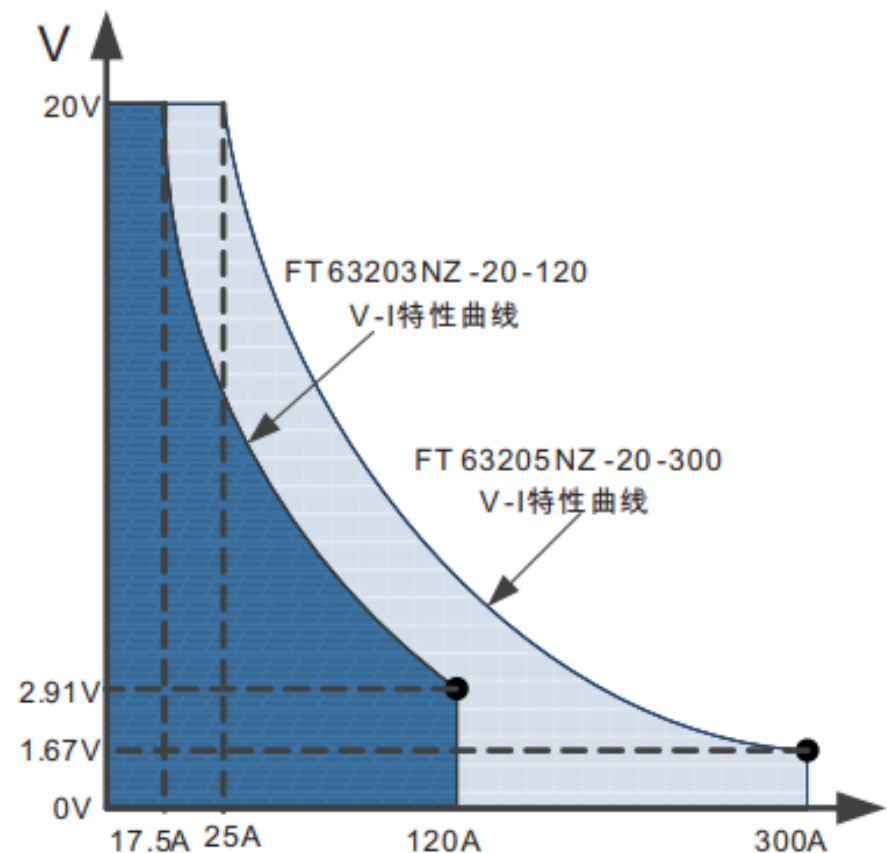
NZ/N series ultra-low voltage high current electronic load

## Product Feature

- Voltage: 20V/40V; Current: 0-5000A; Single power: 350W-15KW
- Low voltage load capacity up to 0.2V@5000A; supports 0V input, supports reverse polarity testing, 0V@1200A (NZ series)
- 20KHz transient test function, it can set up and down slope
- OCP/OVP/OPP/OTP/RV and other comprehensive intelligent protection functions

## Product Application

- Fuel cell testing
- CPU and power device power supply system test
- Forced discharge
- Other ultra-low voltage and high current test scenarios



NZ系列产品特性曲线

Full range of low and medium power programmable electronic loads

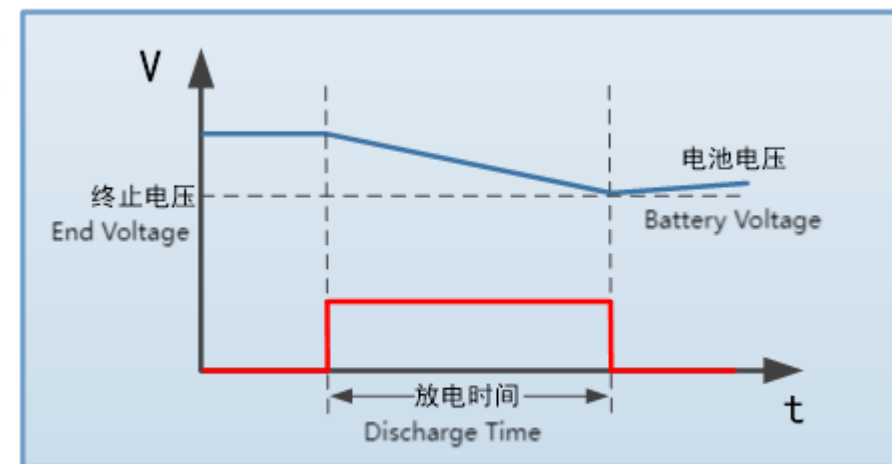
FT6300A series low-power electronic load

### Product Feature

- The maximum load current range can reach up to 240A.
- The dynamic test frequency can reach 20kHz.
- Sequential testing, simulating complex changes in the load.
- Battery internal resistance and battery capacity testing.
- OCP testing, automatically finding the overcurrent protection point.

### Market Application

- Charger test
- Switch power supply test
- LED driver
- Power battery test
- Communication power supply test
- Current devices (relays, fuses, connectors) test



容量测试时电压与电流曲线

Voltage and current curves during capacity testing

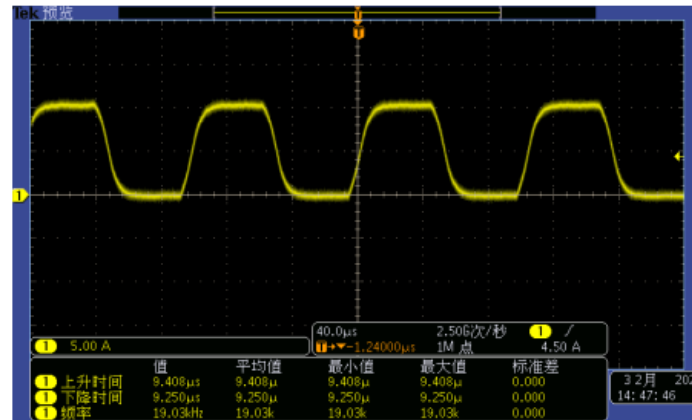


Full range of low power programmable electronic loads

FT6200A series low power electronic load

## Product Feature

- Voltage :150V, 500V;  
Power :150W~400W, constant current (CC), constant voltage (CV), constant resistance (CR) and constant power (CP) on-load modes;
- On-load slope, on-load voltage (Von) and off-load voltage (Voff) can be set
- Dynamic test up to 50kHz;
- The minimum current resolution can reach 0.05mA, and the minimum voltage resolution can reach 0.5mV;
- Current accuracy is (0.05%+0.05%F.S.), voltage accuracy is (0.025%+0.025%F.S.)
- With OCP, OPP, LED simulation, load effect, battery internal resistance, battery discharge and other test functions



10kHz 动态带载

## Market Application

Charger test  
Switching power supply test  
LED driver  
3C battery testing  
Super capacitance test  
Power electronic device





## Low and medium power single load product range

	FT6200	FT6300	FT6400	FT63200
Power Range	150W/300W/400W	150W/300W/600W/ 900W/1350W/1800W	900W/1200W/1350W/ 1800W/2000W/3000W	600W/750W/1500W/ 2250W/3000W
Voltage Range	150V/500V	120V/500V	150V/600V	150V/600V/1200V
Size(height)	2U	3U	3U	2U
Main Market application	Charger, power adapter, LED drive power supply, medium and small power switching power supply, communication power supply, relay, sensor etc		Electric tools, medium and high power switching power supply, battery pack test	

## Multichannel programmable electronic load series



FT6100/FT6110 series multi-channel electronic load array

### >>> Product Feature

- Voltage: 60V/150V/500V; Current: 0-60A; Single channel power: 45W-1080W
- The modular design of the channel is small in size, economical and cost-effective, which can realize 3U/8CH/12CH/36CH/48CH, and the electrical isolation between the channels can be separately controlled or arbitrarily connected in parallel
- The channel supports dynamic and sequential functions, and the current and timing of the load are editable;
- Standard configuration includes RS485 and LAN, supporting the standard MODBUS communication protocol. It comes with a feature-rich upper-level computer software and a comprehensive dynamic link library, making it easy for secondary development.

### >>> Market Application

- Embedded integrated application development and design
- Small power supply, mobile phone charger
- Automobile wiring harness



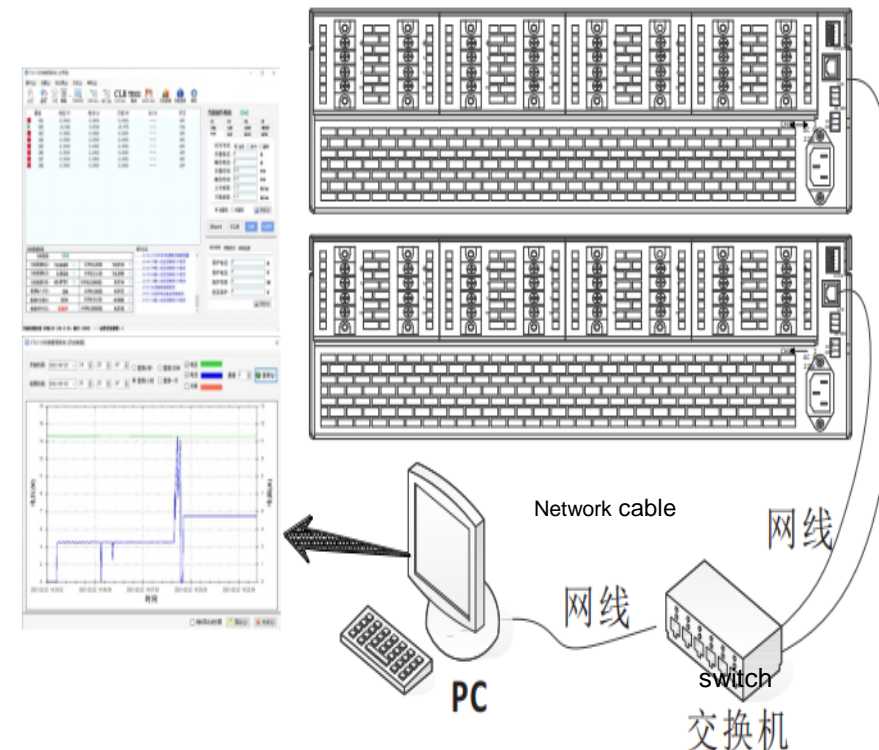
FT66100 multi-channel DC electronic load

### >>> Product Feature

- Voltage: 80V/500V; Current: 0-120A; Single machine power: 300W-600W;
- 8-inch color display screen, capable of simultaneously displaying 6-channel data and setting parameters, with adaptive screen display;
- 5-digit display, 0.05% precision, 20kHz dynamic frequency, adjustable rise and fall slopes;
- The synchronous mode can be set between multiple modules to cope with the test of large current or multi-output channel equipment;
- It supports automated testing, with the system automatically completing the testing process and providing test results.

### >>> Market Application

- Low power multi-channel power supply BMS and other small power supply products
- Automotive wiring harness, connector and other products testing



## Multi-channel load product series

	FT66100 series	FT6100 series	FT6110 A/R series
Power Range	300W/600W	50W - 1080W	150W/300W
Voltage Range	80V/500V	80V/100V/500V	150V/500V
Channel number	300W*6CH 600W*3CH	3U/12CH 3U/48CH	150W*8CH 300W*4CH
Main market application	Charger, power adapter, LED drive power supply, medium and small power switching power supply, communication power supply	Automotive wiring harness testing Mobile phone adapter Battery charge and discharge	Mobile phone adapter Battery charge and discharge (Ripple test function required)
Competitive advantage	Large screen centralized display; Industry-first 6-channel chassis	Excellent cost-per-performance ratio The size is 1/6 that of the competitors.	Excellent price-performance ratio; High sampling rate, ripple volume is 1/3 – 1/2 of competitors



## Multichannel battery simulator



FT8330 series multi-channel battery simulator

### Product Feature

- Voltage: 0-6V
- Current: 1A/2A/3A
- Channel: 12/18/24/36CH
- Voltage precision: 0.01%+0.01%F.S.
- Current accuracy: 0.05%+0.05%F.S
- Each channel is isolated and can be connected in parallel or in series
- 30ppm/°C Temperature drift coefficient is less than 30ppm/°C

### Market Application

- BMS(Battery Management System) test
- CMS(supercapacitor management system) test
- Battery cell test



FT8331 series multi-channel battery simulator

### Product Feature

- Voltage: 6V/15V/20V
- Current: 1A/2A/3A/5A
- Channel: 4/8/12/16/18/24CH
- Voltage precision:0.01%F.S.
- Dual-range current, uA-level measurement
- Fault simulation function, it can simulate battery drop/short circuit/reverse connection, etc
- Charge test, battery simulation, SOC simulation, pulse function
- The temperature drift coefficient is less than 25ppm/°C

- Supercapacitor core testing
- Headphones, mobile phones and other consumer electronics testing

## Multi-channel Battery Simulator (two-quadrant)



FT8340 series multi-channel battery simulator

### Product Feature

- Voltage:  $\pm 5V/\pm 6V/\pm 15V/\pm 20V$
- Current:  $\pm 1A/\pm 2A/\pm 3A/\pm 5A/\pm 10A$
- Channel: 4/8/12CH
- Seamless source/load switching, battery characteristics simulation
- Fault simulation function, simulate battery drop/short circuit/reverse connection.
- Dual-range current, uA-level measurement
- The temperature drift coefficient is less than 25ppm/°C

### Market Appliciton

- BMS(Battery Management System) test
- CMS(supercapacitor management system) test
- Battery cell test



FT8350 series multi-channel battery simulator

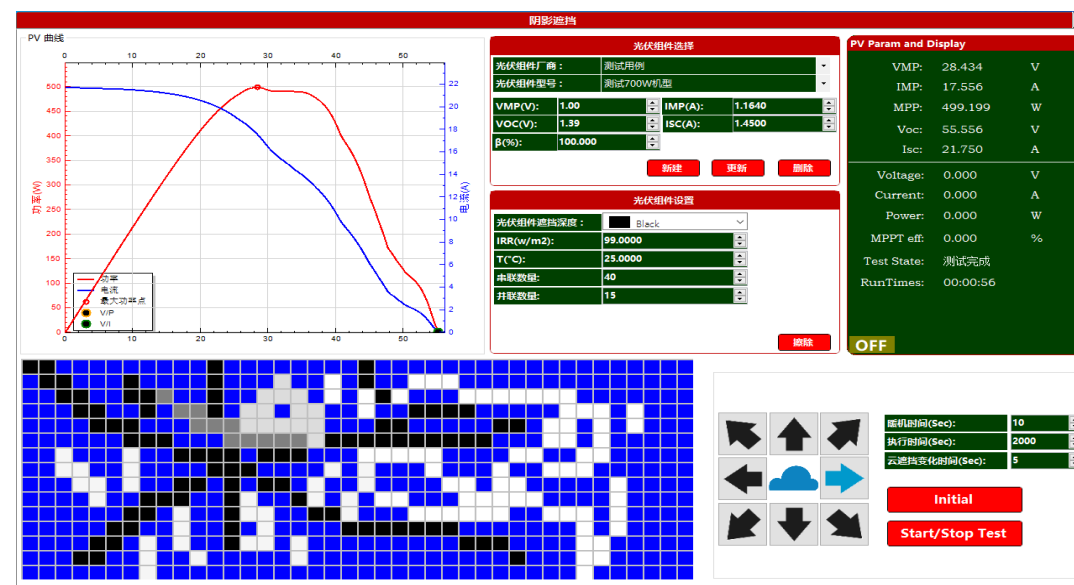
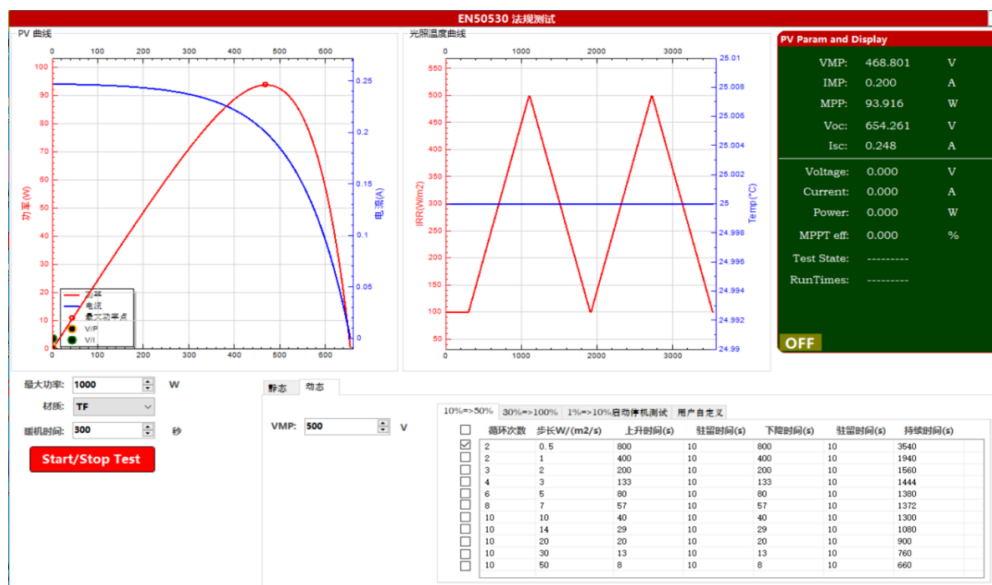
### Product Feature

- Voltage:  $\pm 6V/\pm 15V/\pm 20V$
- Current:  $\pm 1A/\pm 2A/\pm 3A/\pm 5A$
- Channel: 16/18/24C
- Voltage accuracy:0.01%F.S.
- Professional testing software, supporting data reporting and data analysis
- The USB port supports file import, export, and screenshot
- The temperature drift coefficient is less than 25ppm/°C

- Charge-discharge protection board research and development test
- Power tools production test

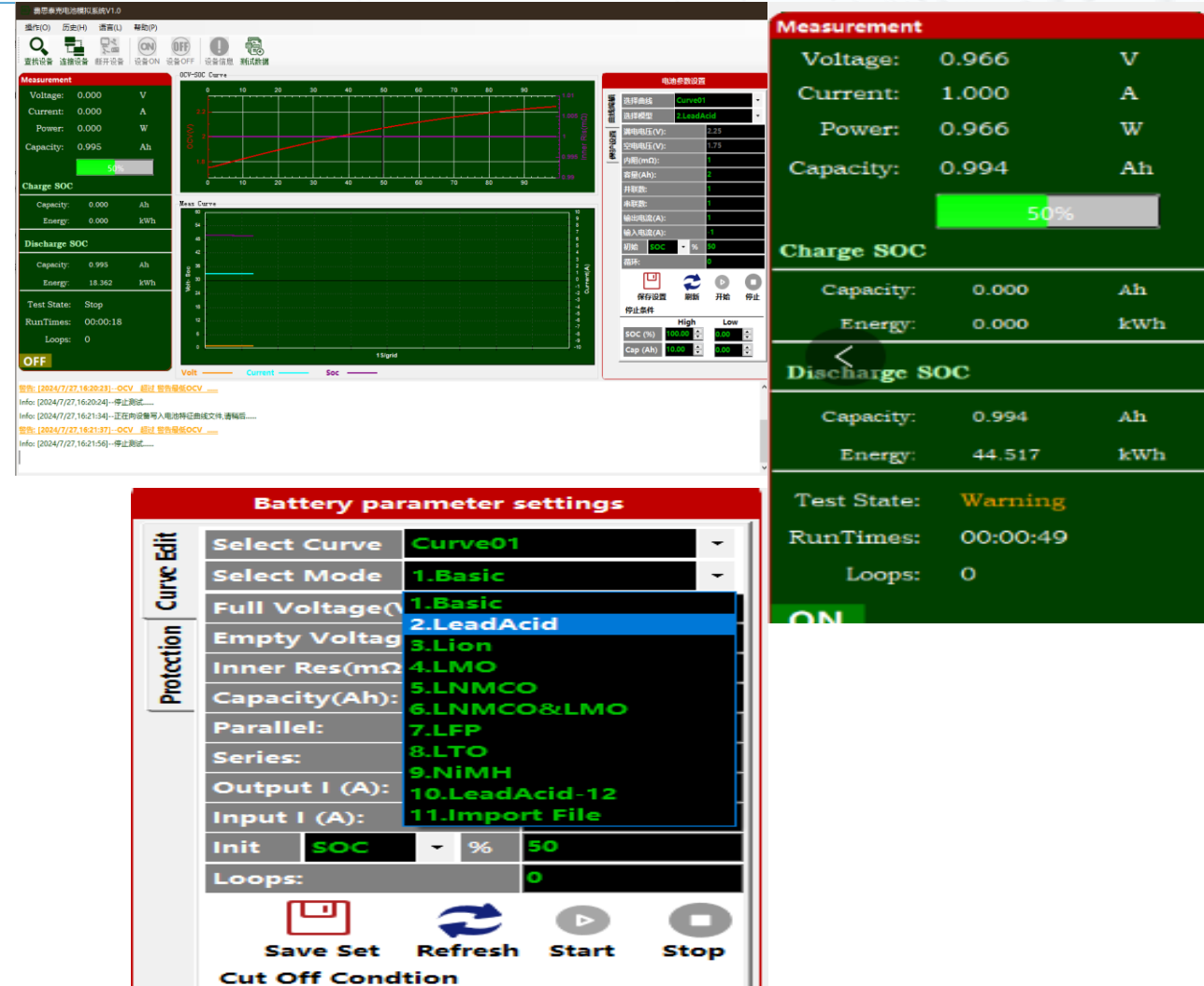
## Solar PV matrix simulation software

- Test static & dynamic MPPT performance;
- Built-in EN50530, SANDIA, NB/T32004, CGC/GF004, CGC/GF0355 regulatory test procedures, and test reports generation;  
It can simulate the I-V curve of solar panel under the shield (cloud cover);
- Serial and parallel testing under different parameters of simulated solar panels;
- It has a variety of solar cells (single crystal silicon cells, polycrystalline silicon cells, thin film cells) output characteristics (Fill Factor) simulation;
- It supports FTP series, FTG series, FTP9000 series and FTB9000 series power supply.



## Battery simulation software

- With the combination of software and hardware, the maximum voltage of the battery simulator can reach 2250V;
- Flexible use of master and slave parallel machine, power expansion to 1.8MW
- Bidirectional feedback load battery simulator, feedback efficiency up to 95%
- Seamless charging and discharging cell state flexible switching
- 10 kinds of battery type characteristic curve (lithium ion battery/lead acid/nickel hydrogen/lithium iron phosphate...)
- User-defined battery characteristic curve (OCV&SOC&R)
- Convenient configuration of battery simulation parameters, fast simulation of battery characteristic curve;
- Battery simulator equipped with protection and alarm function
- Initial capacity SOC setting function





### High precision AC-DC measuring instrument



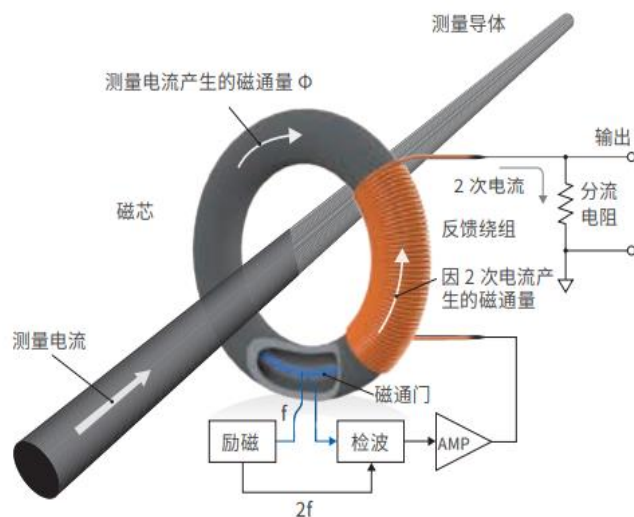
#### »» Product Feature

- Measuring accuracy of 6½;
- Measuring voltage up to 2000V, current 1500A;
- it can measure single-phase AC, DC voltage, current, frequency, active power;
- Multiple voltage and current ranges, automatically switchable
- portable design, easy to carry for on-site measurement;
- Standard RS232, RS485, LAN, CAN communication interface, it can directly communicate with PC;
- It supports SCPI, ModBus, CANOpen communication protocols;
- Touch screen operation, Chinese and English menu interface.

#### »» Market Application

- For metrology research;
- Ac-dc measurement in power, metrology, military, manufacturing, scientific research and other fields;
- Government inspection agencies and other metering fields for single-phase AC-DC voltmeter, ammeter, power meter.

## High precision current sensor



## Product Feature

- Adopting multi-point zero flux technology, high precision, small zero-point deviation, high linearity;;
- Current range:  $\pm 60A \sim \pm 10000A$ , multiple current specifications are optional;
- High precision, current precision 10ppm;
- With temperature compensation technology, temperature stability 0.1ppm/K;
- For Ac and DC use, it can measure AC, DC, pulse current;
- Primary and secondary side isolation measurement;
- No start-up warm-up time;
- Wide band measurement, the maximum measurement bandwidth of 500kHz;
- Low response time, minimum dynamic response time 1us.

## Market application

Medical equipment: scanner, MRI  
 Power: converter, inverter  
 New energy: photovoltaics, wind energy  
 Car: Electric car  
 Ships: Electrically powered ships

Metrology: verification and calibration;  
 Industrial control: industrial motor drive, robot;  
 Rail transit: high-speed train, subway, trolley bus;  
 Dc excitation system measurement

# Honorable Customers

## Military research Institute



中国航天



## Colleges and universities



清华大学



复旦大学



## Fuel cell



奥特迅



元正能源



SHINRY 欣锐科技



## Power battery



亿纬锂能



## Automotive electronics



中国一汽



# Honorable Customers

**Faith**  
Technologies

## Power electronics

**KSTAR** 科士达

**EAST**® 易事特

**Winline**  
Technology

**GROWATT**

**Sinexcel**  
盛弘电气

**CHNT**  
正泰

**DELIXI**  
ELECTRIC  
德力西电气

## Communication

  
**HUAWEI**

**ZTE**中兴

**VIVO**  
智能手机

**Coolpad**

## T&M

**KETOP**

 **国机智能**  
**SINOMACH**

**ICAS**  
英格尔检测认证集团  
ICAS Testing & Certification Group

  
**CEPREI**

**CTI** 华测检测  
CENTRE TESTING INTERNATIONAL

 **中国电气装备**  
China Electrical Equipment  
许继电气股份有限公司  
XJ ELECTRIC CORPORATION

  
**CSSC**

船舶工业集团公司

  
**VAPEL**

核达中远通股份有限公司

  
**BAOLONG**

  
**TTI**

**BAIC**  
北汽新能源

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