

# FT6100 E-load (45W \* 12CH, 150W \* 12CH, 300W \* 6CH)

## Multi Channel Programmable DC Electronic Load



FT6100 (3U)

- Voltage range: 60V, 500V;
- Current range: 3A ~ 40A;
- Rated power: 45W\*12CH/150W\*12CH/300W\*6CH/600W\*3CH
- Compact, cost effective, occupies little space;
- Modular design, 3U/12CH/150W, only 1/4 of conventional load size;
- Electric isolated channels, individual control or parallel;
- CC, CV, CR, CP test modes;
- Dynamic test, programmable sequence test;
- OVP, OCP, OPP, OTP;
- With RS485、LAN ports, support standard MODBUS protocol;
- Complete DLLs, facilitates secondary development;
- Standard PC software;
- High reliability, long mean time between failures;
- LCD displays each channel's voltage, current, power and status;
- 19-inch rack-mounted 3U chassis, facilitates system integration.

### General

The FT6100 series is a multi-channel programmable DC electronic load product developed with high reliability and integration. The products are tailored for integrated applications and are extremely cost-effective. It can replace low-power single electronic loads in most integrated applications, which can save a lot of space for system construction and greatly save costs. FT6100 is specially designed for embedded integrated application development, standard 19-inch chassis size, equipped with RS485, LAN communication interface, and adopts Modbus-RTU. It supports the secondary development of most software platforms such as Visual C++, C#, Delphi, Visual Basic, Labview, etc. Users can customize the application software according to their needs.

FT6100 E-load (45W \* 12CH, 150W \* 12CH, 300W \* 6CH, 600W \* 3CH)

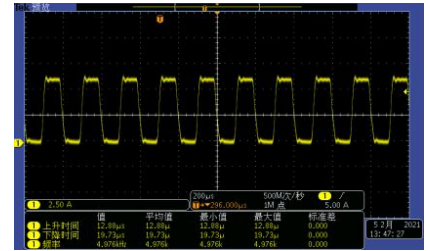
**3U/12CH/150W ultra-high integration**

FT6100 series multi-channel programmable electronic load adopts ultra-high integration design, 12 channels in a single 3U height unit, size only 1/4 of conventional electronic load. All channels are independent and electrically isolated, can be controlled individually.



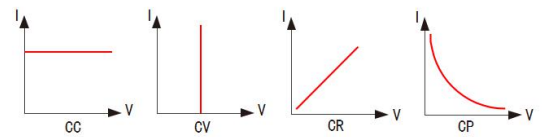
**Transient test**

The FT6100 series electronic loads provide programmable dynamic test function. The dynamic mode is used to simulate various load mutations and abnormal situations, and is suitable for testing the dynamic characteristics of the power supply. The dynamic pulse width: 50us~60000ms



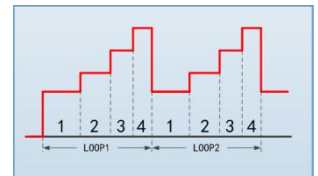
**Static test**

The FT6100 series multi-channel electronic loads operate in constant current, constant voltage, constant resistance and constant power modes to satisfy a wide range of test requirements.



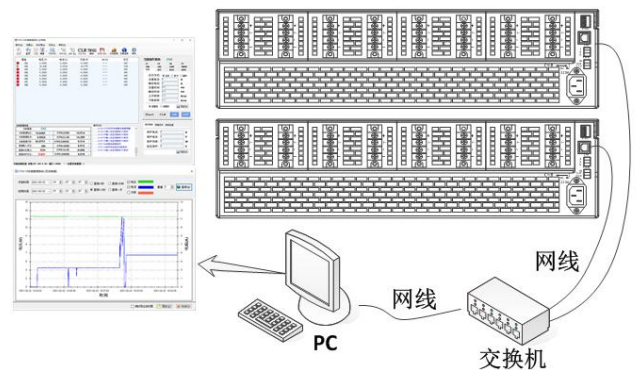
**Programmable sequence test**

FT6100 series electronic loads provide sequence test function. Users can edit a load test sequence to simulate various load input changes.



**Integration and programming**

The FT6100 series electronic loads have LAN, RS485 interfaces for system integration of multiple units. FT6100 supports Modbus protocol, and provides programming manuals and DLL development package. It supports C#, C++, Delphi, Labview development languages, facilitates user's secondary development. The product comes with a demo software, which can perform all functions of the load system, as well as waveform display and data storage.



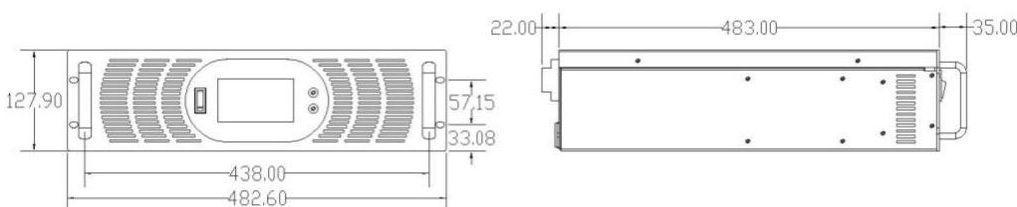
**Model options**

Model	Specification	Model	Specification
FT6100	FT6100 module cabinet	FT6100S *	FT6100 module cabinet
FT611	Module 60V/20A/150W	FT611S	Module 60V/20A/150W
FT612	Module 500V/3A/150W	FT612S	Module 500V/3A/150W
FT614	Module 60V/20A/300W	FT614S	Module 60V/20A/300W
FT615	Module 500V/6A/300W	FT615S	Module 500V/6A/300W
FT616	Module 60V/40A/600W	FT616S	Module 60V/40A/600W
FT613	Module 60V/5A/45W*12CH	FT613S	Module 60V/5A/45W*12CH

\* Notes: Suffix "s" indicates the model has sense terminal.

**Dimension**

FT6100/FT6100S Cabinet dimension



## FT6100 E-load (45W \* 12CH, 150W \* 12CH, 300W \* 6CH, 600W \* 3CH)

Specifications						
Model	FT611/FT611S	FT612/FT612S	FT613/FT613S	FT614/FT614S	FT615/FT615S	FT616/FT616S
Current	20A	3A	5A	20A	6A	40A
Voltage	60V	500V	60V	60V	500V	60V
Power	150W	150W	45W	300W	300W	600W
Min Operate Voltage	1V@20A	5V@3A	0.5V@5A	1V@20A	5V@6A	1V@40A
Max Channels	12	12	12	6	6	3
Constant Current (CC)						
Range	0~20A	0~3A	0~5A	0~20A	0~6A	0~40A
Resolution	5mA	0.75mA	1.25mA	5mA	1.5mA	10mA
Accuracy	0.15%+0.15%F.S.					
Constant Voltage						
Range	0~60V	0~500V	0~60V	0~60V	0~500V	0~60V
Resolution	15mV	125mV	15mV	15mV	125mV	15mV
Accuracy	0.1%+0.15%F.S.					
Constant Resistance						
Range	0.05~500Ω	1.67~5000Ω	0.1~1000Ω	0.05~500Ω	0.84~5000Ω	0.025~500Ω
Resolution	12bits	12bits	12bits	12bits	12bits	12bits
Accuracy	0.35%+0.05S	0.35%+0.005S	0.35%+0.05S	0.35%+0.05S	0.35%+0.005S	0.35%+0.005S
Constant Power						
Range	0~150W	0~150W	0~45W	0~300W	0~300W	0~600W
Resolution	12bits	12bits	12bits	12bits	12bits	12bits
Accuracy	0.5%+1%F.S.					
Current Measurement						
Range	0~20A	0~3A	0~5A	0~20A	0~6A	0~40A
Resolution	5mA	0.75mA	1.25mA	5mA	1.5mA	10mA
Accuracy	0.15%+0.15%F.S.					
Voltage Measurement						
Range	0~60V	0~500V	0~60V	0~60V	0~500V	0~60V
Resolution	15mV	125mV	15mV	15mV	125mV	15mV
Accuracy	0.1%+0.15%F.S.					
Dynamic Current						
Range	0~20A	0~3A	0~5A	0~20A	0~6A	0~40A
Pulse Width	1~60000ms	1~60000ms	1~60000ms	1~60000ms	1~60000ms	1~60000ms
Resolution	1ms	1ms	1ms	1ms	1ms	1ms
Accuracy	1ms+100ppm	1ms+100ppm	1ms+100ppm	1ms+100ppm	1ms+100ppm	1ms+100ppm
Others						
AC Input	220VAC±10%					
Temperature Coefficient	40ppm/°C					