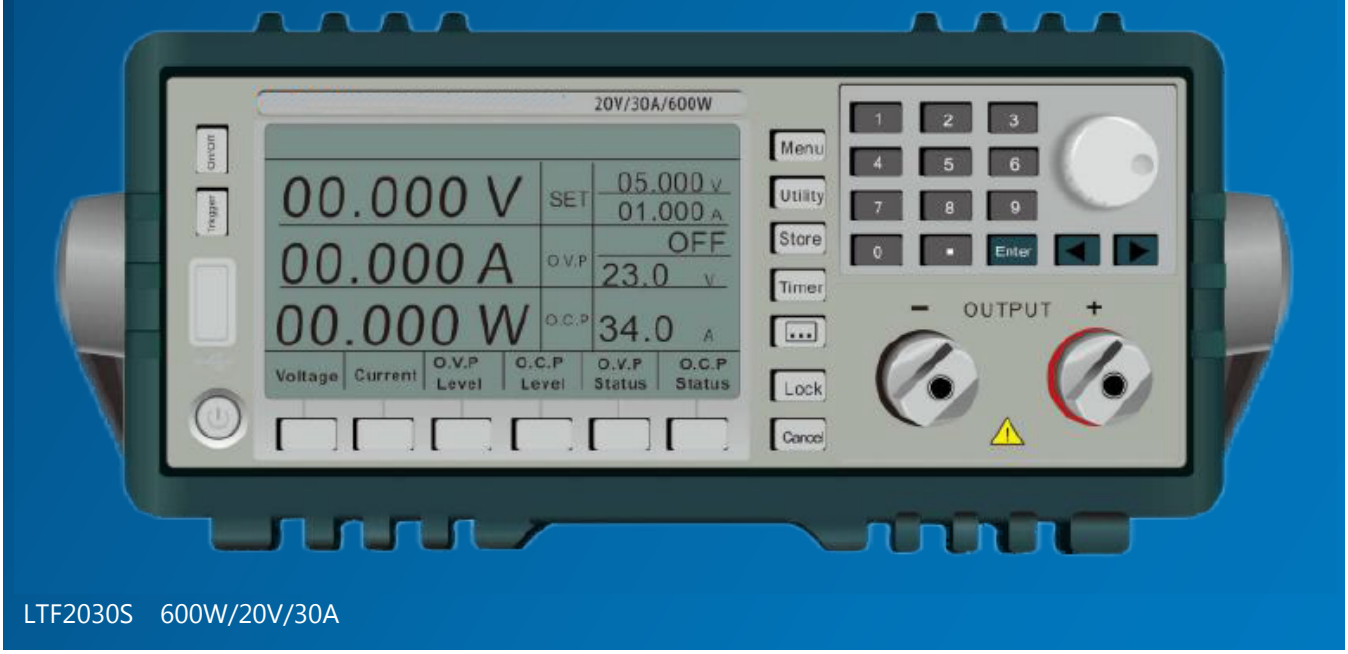
Programmable Linear DC Power Supply



LTF2030S 600W/20V/30A

- < 0.01% low regulation rate;
- Ultra high resolution and accuracy of 1mV/1mA;
- Low ripple noise;
- OCP, OVP, OPP, OTP, RVP;
- CV, CC output modes, switched automatically according to the load condition;
- One-key lock function, prevent misoperation;
- Store/recall 100 groups of V/I data;
- Remote sense voltage compensation;
- Support battery charging;
- Dual range (some models);
- Standard RS232, support SCPI;
- Optional analog interface, optional RS485 or LAN interface, optional MODBUS-RTU protocol.
- 4.3-inch LCD display

General

The LTF series is a programmable DC linear power supply with high performance, multi-function, medium and small power features. The product is stable and mature, and has comprehensive protection functions such as reverse polarity, overvoltage, overcurrent, overload and overtemperature, which can keep the power supply and load safe in unstable environments. LTF has a regulation rate of < 0.01%, ripple and noise of < 1mVrms and fine transient performance, and is suitable for application environments like current surges. The LTF series DC power supply is not only suitable for high-grade laboratory, but also for high-performance test systems.

CV/CC auto crossover

The LTF series power supply is self-adaptive to constant voltage or constant current output state according to the load. The power supply automatically switches the working state between CV and CC.

Shortcut Recall

The LTF series power supply supports a shortcut recall function, which can call the corresponding power output parameters and state with one key, hence greatly improves the test speed, as well as prevents misoperation. It is very helpful for testing, quality control, and production.

Sequence

LTF series power supply supports multi-step sequence function, the power supply will change the working state according to time or trigger, which is used to test the function and stability of load products.

Remote sense

When the load consumes a large current, a voltage drop will be generated on the connection line from the power supply to the load terminal, and remote sensing can automatically compensate for the voltage drop.

Battery charging function

LTF series power supply allows for battery charging based on specified parameters. Users can define the parameters such as: trickle charge threshold voltage, float charge voltage, trickle charge current, standard charge current, termination current threshold, charging time, etc., hence fully simulate the battery charging process and effectively protect the battery .

Model options

M	Specification	Voltage resolution	Current resolution	Hardware limit
LTF3003	30V/3A/90W	1mV	0.1mA	32V/3.2A/90W
LTF3005	30V/5A/150W	1mV	0.1mA	32V/5.5A/150W
LTF3603	36V/3A/108W	1mV	0.1mA	40V/3.2A/108W
LTF3605	36V/5A/180W	1mV	0.1mA	40V/5.5A/180W
LTF6003	60V/3A/180W	1mV	0.1mA	64V/3.2A/180W
LTF6005	60V/5A/300W	1mV	0.1mA	64V/5.5A/300W
LTF7503	75V/3A/225W	1mV	0.1mA	80V/3.2A/225W
LTF7505	75V/5A/375W	1mV	0.1mA	80V/5.5A/375W
LTF3010	30V/10A/300W	1mV	1mA	32V/11A/300W
LTF12001	120V/1A/120W	10mV	0.1mA	128V/1.1A/120W
LTF12002	120V/2A/240W	10mV	0.1mA	128V/2.2A/240W
LTF150015	150V/1.5A/225W	10mV	0.1mA	160V/1.6A/225W
LTF1820	18V/20A/360W	1mV	1mA	19V/21A/360W
LTF12003	120V/3A/360W	10mV	0.1mA	128V/3.2A/360W
LTF300012	300V/1.2A/360W	10mV	0.1mA	320V/1.2A/360W
LTF500007	500V/0.7A/350W	10mV	0.1mA	500V/0.7A/350W
LTF2030S	20V/30A/600W	1mV	1mA	20.5V/30.5A/600W
LTF3020S	30V/20A/600W	1mV	1mA	31V/21A/600W
LTF6010S	60V/10A/600W	1mV	1mA	60.5V/10.5A/600W
LTF80075S	80V/7.5A/600W	1mV	1mA	80.5V/8A/600W
LTF1560S	15V/60A/900W	1mV	1mA	15.5V/60.5A/900W
LTF2045S	20V/45A/900W	1mV	1mA	20.5V/45.5A/900W
LTF3030S	30V/30A/900W	1mV	1mA	31V/31A/900W
LTF3625S	36V/25A/900W	1mV	1mA	36.5V/25.5A/900W
LTF4520S	45V/20A/900W	1mV	1mA	45.5V/20.5A/900W
LTF6015S	60V/15A/900W	1mV	1mA	60.5V/15.5A/900W
LTF8011S	80V/11A/900W	1mV	1mA	80.5V/11.5A/900W
LTF120075S	120V/7.5A/900W	10mV	1mA	121V/7.6A/900W
LTF15006S	150V/6A/900W	10mV	1mA	151V/6.1A/900W

Specifications - 1	
Model	LTF
Voltage Output	
Line Regulation	≤0.01%+3mV
Load Regulation	≤0.01%+3mV(I≤3A)/≤0.02%+5mV(I>3A)
Recover time	≤100us(50% load change, minimum load 0.5A)
Ripple Noise	≤1mVrms(I≤3A) (5Hz～1MHz)/≤2mVrms(I>3A) (5Hz～1MHz)
Temperature coefficient	≤100ppm/℃
Set Accuracy	±(0.03%+10mV) (25±5℃)
Current Output	
Line Regulation	≤0.1%+3mA
Load Regulation	≤0.1%+3mA(I≤3A)/≤0.1%+5mA(I>3A)
Ripple Noise	≤3mArms(I≤3A)/≤6mArms(I>3A)
Set Accuracy	±(0.1%+0.1%F.S.)(25±5℃)
Display	
Voltage	5 digits display
Current	5 digits display
Voltage Accuracy	±(0.02% of reading+5mV) (25±5℃)
Current Accuracy	±(0.1% of reading+0.1%F.S.) (25±5℃)
Other Characteristics	
Protection	OVP, OCP, OPP, OTP, RVP
Remote Sense	Max conpensate voltage 5%F.S.
Battery charging	Lithium ion battery charging curve
Keyboard Lock	Yes
Interface	Standard RS232, support SCPI (optional: analog interface, RS485, MODBUS-RTU protocol)
Memory	100 groups
Insulation	Mainframe and DC terminal: ≥20MΩ/500VDC Mainframe and AC INPUT: ≥30MΩ/500VDC
AC Input	AC 110V/220V±10%，50/60Hz
Dimension	352(D)×215(W)×89(H)mm
Weight	6.8～9.8kg

Specifications - 2	
Model	LTF (with Suffix "S")
Voltage Output	
Line Regulation	≤ 0.01%+4mV
Load Regulation	≤0.1%+5mV
Recover time	≤1.5ms(50% load change)
Ripple Noise	2mVrms，30mVpp
Temperature coefficient	≤100ppm/℃
Set Accuracy	±(0.03% of reading+10mV)(25±5℃)
Set Accuracy	1mV
Current Output	
Line Regulation	≤0.1%+3mA
Load Regulation	≤0.1%+5mA
Ripple Noise	≤10mArms
Set Accuracy	±(0.1% of reading+0.1% F.S.)(25±5℃)
Set Resolution	1mA
Display	
Voltage	5 digits display
Current	5 digits display
Voltage Resolution	1mV
Current Resolution	1mA
Voltage Accuracy	±(0.02% of reading+5mV)(25±5℃)
Current Accuracy	±(0.1% of reading+0.1%F.S.)(25±5℃)
Other Characteristic	
Protection	OVP, OCP, OPP, OTP, RVP
Keyboard Lock	Yes
Interface	Standard RS232, support SCPI (optional: analog interface, RS485, MODBUS-RTU protocol)
Memory	100 Groups
AC INPUT	AC 220V±%，50/60Hz
Dimension	352(D)×215(W)×89(H)mm
Weight	4.5～5.5kg