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ITECH ELECTRONICS
Your Power Testing Solution

IT6900B Wide-range Programmable DC Power Supply

IT6900B Wide-range Programmable DC Power Supply

IT6900B series wide range programmable power supply has built-in standard RS232, USB, GPIB, RS485 and analog interface, supports SCPI protocol, facilitate remote control, industrial PLC control and the formation of intelligent test platform. Remote compensation terminals avoid the problem of inaccurate testing caused by voltage drop on the wire. Low ripple, low noise and built-in digital voltmeter make IT6900B easy to do external measurement. IT6900B can be widely used in testing DC-DC power supply module, battery charging and sensors and other test areas.

Applications

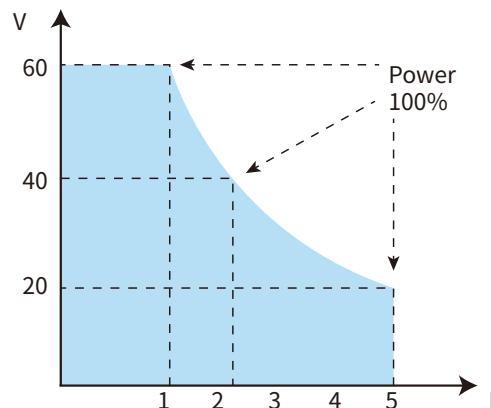DC-DC power module, battery charging and sensors, etc.

Feature

- VFD display
- Adjust voltage and current via knob or numerical key pad
- High accuracy and high resolution
- Adjust digital step value via cursor
- Output voltage and current values accordance with procedure
- Output Timer(0.1 ~ 99999.9S) Function
- Low ripple and low noise
- Remote Sense Function
- Intelligent fan control
- Rich SCPI instructions to facilitate the formation of intelligent test platform
- Support front and rear panel output
- Optional external analog function
- Standard communication interface RS232/USB/GPIB/RS485

Auto-range Function

IT6900B series power supply can achieve the combined output of multiple voltage and current at a fixed power. Single power supply can meet different DUT tests with high voltage low current or high current low voltage, at the same time, because the output of voltage and current is controlled by the limit power, it will show the switching of voltage and current auto ranging.
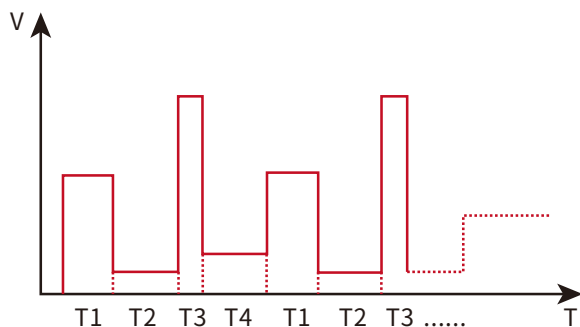

I-V Curve Graph

Model	Voltage	Current	Power	Size
IT6922B	60V	5A	100W	1/2 2U
IT6932B	60V	10A	200W	1/2 2U
IT6942B	60V	15A	360W	1/2 2U
IT6952B	60V	25A	600W	1/2 2U
IT6953B	150V	10A	600W	1/2 2U

Power Supply

Remote Sense

In order to avoid the voltage drop caused by the length of the wire connecting the load, the remote test allows measurement directly on the terminal of the test object to improve the measurement accuracy. S +, S is the remote measurement terminal, +, - is the output positive and negative terminals. When using the remote measurement function, it is necessary to disconnect the wires connected to the "+, -" terminals and lead S +, S to the test object.

List Mode

List mode allows user to create a sequence of steps, store it into the power supply's non- volatile memory and execute the input parameters for generating a list include the name of the list file, the input steps (no more than 150 steps), the step time (the minimum is 100mS) and the value of each step.

OVP Functions

IT6900B series power supply provides OVP function. The over voltage protection point of the power supply can be set via the keys on the panel. Once power supply is protected (OVP), the output will be off immediately and "OVP" indicator light will be lit, the VFD display "OVER VOLT".

Separate Local key can quickly switch to panel operation mode from PC operation mode

Built-in DVM

IT6900B provides a built-in digital meter which can measure DC volts in a range from 0.001V to 61.000V. The voltage value is displayed on the left bottom field of the display.
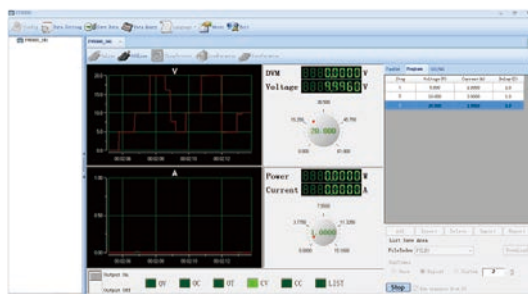
Timer Function

IT6900B series supports output timer function, in ON mode, the indicator light "Timer" will be lit on the VFD screen. When output of power supply is opened, timer will begin to work, after reaching the definite time, output will be off automatically. Timing output time range is 0.1s~99999.9s.

Optional external analog interface

The rear panel DB9 analog interface is connected via cable and external DB9 socket board. The corresponding pin on the DB9 socket board is added 0~10V voltage to simulate the voltage or current output from 0 to full-scale.

IT9000 PC software

IT6900B series has built-in RS232, USB, GPIB RS485, and provides free IT9000 series software. Using PC software, IT6900B can easily remote control, set voltage and current, record storage data, programming, and test automatically.
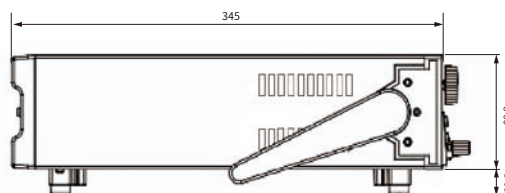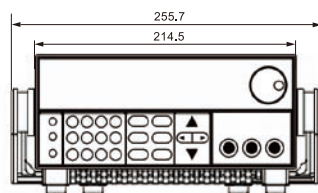
IT6900B Specifications

		IT6922B	IT6932B	IT6942B
Rated values (0 °C~40 °C)	Voltage	0~60V	0~60V	0~60V
	Current	0~5A	0~10A	0~15A
	Power	100W	200W	360W
Load regulation (%of output+offset)	Voltage	≤0.01%+3mV	≤0.01%+10mV	≤0.01%+30mV
	Current	≤0.05%+2mA	≤0.05%+4mA	≤0.05%+6mA
Line regulation ±(%of output+offset)	Voltage	≤0.01%+3mV	≤0.01%+10mV	≤0.01%+30mV
	Current	≤0.05%+2mA	≤0.05%+4mA	≤0.05%+6mA
Setup resolution	Voltage	1mV	1mV	1mV
	Current	0.1mA	1mA	0.1mA
Readback resolution	Voltage	1mV	1mV	1mV
	Current	0.1mA	1mA	0.1mA(<10A) 1mA(>10A)
Setup accuracy (within twelve months) (25°C±5°C) (%of output+offset)	Voltage	≤0.03%+5mV	≤0.03%+5mV	≤0.03%+5mV
	Current	≤0.1%+5mA	≤0.1%+10mA	≤0.1%+15mA
Read back resolution (W) (25°C±5°C)(%of output+offset)	Voltage	≤0.03%+5mV	≤0.03%+5mV	≤0.03%+5mV
	Current	≤0.1%+5mA	≤0.1%+10mA	≤0.1%+15mA
Ripple (20Hz ~20MHz)	Voltage	≤5mVp-p	≤8mVp-p	≤15mVp
	Current	≤5mArms	≤6mArms	≤8mArms
Sample rate		10Hz	10Hz	10Hz
Dimension (mm)		214.5mmW×88.2mmH×354.6mmD	214.5mmW×88.2mmH×354.6mmD	214.5mmW×88.2mmH×354.6mmD
Weight (net)		7.7Kg	7.7Kg	7.7Kg

		IT6952B	IT6953B
Rated values (0 °C~40 °C)	Voltage	0~60V	0~150V
	Current	0~25A	0~10A
	Power	600W	600W
Load regulation (%of output+offset)	Voltage	≤0.01%+30mV	≤0.01%+25mV
	Current	≤0.1%+10mA	≤0.5%+10mA
Line regulation ±(%of output+offset)	Voltage	≤0.01%+30mV	≤0.01%+25mV
	Current	≤0.1%+10mA	≤0.5%+10mA
Setup resolution	Voltage	1mV	1mV(<100V) 10mV(≥100V)
	Current	0.1mA	0.1mA
Readback resolution	Voltage	1mV	1mV(<100V) 10mV(≥100V)
	Current	0.1mA(<10A) 1mA(>10A)	0.1mA
Setup accuracy (within twelve months) (25°C±5°C) (%of output+offset)	Voltage	≤0.03%+5mV	≤0.03%+20mV
	Current	≤0.1%+25mA	≤0.1%+25mA
Read back resolution (W) (25°C±5°C)(%of output+offset)	Voltage	≤0.03%+5mV	≤0.03%+20mV
	Current	≤0.1%+25mA	≤0.1%+25mA
Ripple (20Hz ~20MHz)	Voltage	≤20mVp-p	≤50mVp-p
	Current	≤15mArms	≤15mArms
Sample rate		10Hz	10Hz
Dimension (mm)		214.5mmW×88.2mmH×445mmD	214.5mmW×88.2mmH×445mmD
Weight (net)		15Kg	15Kg

*This information is subject to change without notice

IT6900B Dimension (Unit: mm)

- **IT6922B/IT6932B/IT6942B:**
  214.5mmW x 88.2mmH x 345mmD

Power Supply