IT6800A/B Single Channel Programmable DC Power Supply



IT6800 single channel programmable DC power supply (180W-216W) supports resolution 1mV/0.1mA. Users can adjust the voltage/current step value by pressing the left and right keys to move the cursor and program on the front panel. IT6800 supports OVP/OTP protection and timer function. Built-in RS232 and USB communication interfaces offer the user convenient experience.

Applications

Laboratory testing, production testing, maintenance testing

Feature

- Support panel programming, numeric keypad operation
- High accuracy and resolution 1mV/0.1mA
- Outputs according to the programmed voltage and current values
- Adjust the voltage and current via knob
- Lower ripple and noise
- Remote sense
- Built-in RS232 / USB/ GPIB interface *1
- Intelligent fan control, save energy and reduce noise

*1Built-in GPIB is available with IT6800B series only

Model	Voltage	Current	Power	Interface
IT6831A	18V	10A	180W	USB/RS232
IT6832A	32V	6A	192W	USB/RS232
IT6832B	32V	6A	192W	USB/RS232/GPIB
IT6833A	72V	3A	216W	USB/RS232
IT6833B	72V	3A	216W	USB/RS232/GPIB
IT6835A	50V	4A	200W	USB/RS232
IT6835B	50V	4A	200W	USB/RS232/GPIB

*IT6800A single channel series is standard model, IT6800B single channel series is optional if you need GPIB interface.

Support panel programming function (List)

IT6800A/B Series Single Channel Programmable DC Power Supply generates a variety of output change sequences by sequentially operating each single step value and time. The parameters in the sequence include time unit, single step voltage, single step current, single step time, and the next step, loop steps, saving files, and so on. After the sequential operation is completed, when a trigger signal is received, the power supply will be turned on until the sequence operation is completed or receive another trigger signal again.

Output timer

IT6800A/B series supports Output timer function, users can start this function in the Menu and set the time. The timers starts working when the unit is powered on. The unit will automatically turn off the output when the set time is due. Timing time setting range 0.1 ~ 9999.9S or 0.1 ~ 9999.9M.

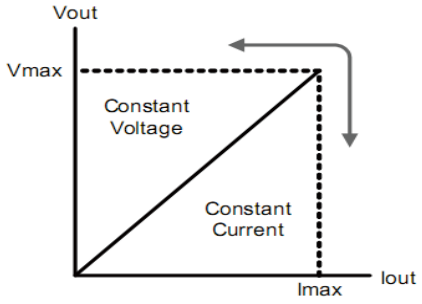
For more information, please visit ITECH official website
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CV/ CC automatic conversion function

With this function, the power supply can be operated continuously from constant voltage mode to constant current mode caused by the load changes



Remote sense function

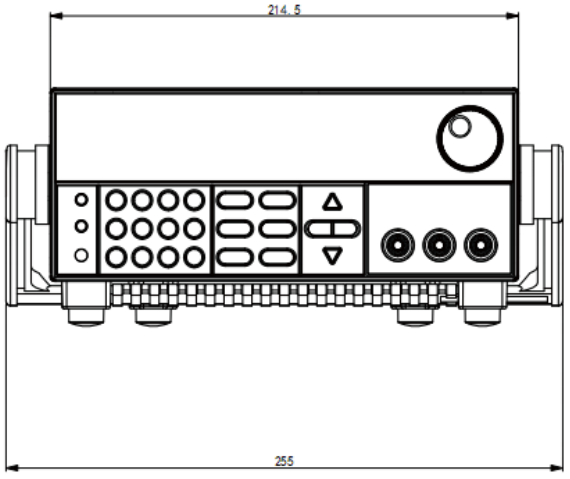
In order to avoid the voltage drop caused by the length of the wire connecting with the load, the remote sense allows measuring directly on the terminal of DUT to improve the measurement accuracy. S +, S- are the remote sense terminals, +, - refers to the output positive and negative terminals. When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

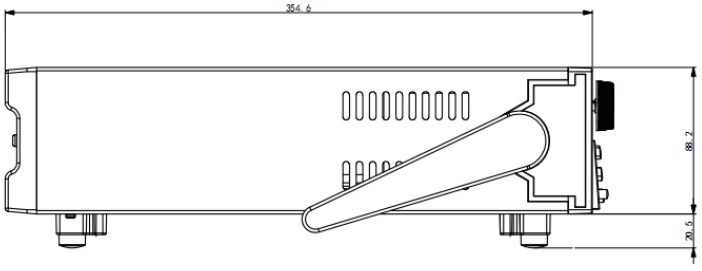
IT6800A/B Specifications

		IT6831A	IT6832A/B	IT6833A/B	IT6835A/B
Rated output (0°C-40 °C)	Voltage	0～18V	0～32V	0～72V	0～50V
	Current	0～10A	0～6A	0～3A	0～4A
	Power	180W	192W	216W	200W
Load regulation ±(%of Output+Offset)	Voltage	≤0.01%+6mV	≤0.01%+5mV	≤0.01%+4mV	≤0.01%+5mV
	Current	≤0.1%+5mA	≤0.01%+3mA	≤0.01%+2mA	≤0.1%+3mA
Line regulation ±(%of Output+Offset)	Voltage	≤0.02%+6mV	≤0.01%+5mV	≤0.01%+4mV	≤0.02%+5mV
	Current	≤0.1%+5mA	≤0.01%+3mA	≤0.01%+2mA	≤0.1%+3mA
Programming resolution	Voltage	1mV	1mV	1mV	1mV
	Current	0.1mA(＜10A)/1mA(≥10A)	0.1mA	0.1mA	1mA
Readback resolution	Voltage	1mV	1mV	1mV	1mV
	Current	0.1mA(＜10A)/1mA(≥10A)	0.1mA	0.1mA	1mA
Programming accuracy (Within 12 months, 25°C±5°C)±(%of Output+Offset)	Voltage	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV
	Current	≤0.1%+12mA	≤0.1%+8mA	≤0.1%+5mA	≤0.1%+8mA
Readback accuracy (Within 12 months, 25°C±5°C)±(%of Output+Offset)	Voltage	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV
	Current	≤0.1%+12mA	≤0.1%+8mA	≤0.1%+5mA	≤0.1%+8mA
Ripple(20Hz-20MHz)	Voltage	≤4mVp-p and 1.5mVrms	≤4mVp-p and 1mVrms	≤4mVp-p and 1mVrms	≤3mVp-p and 1mVrms
	Current	＜7mArms	＜6mArms	＜5mArms	≤6mArms
Transient response time (recovered to 75mV)			≤100us(Typical value)		≤50us(Typical value)
Size (mm)			214.5mmW*88.2mmH*354.6mmD		

*IT6800A single channel series is standard model, IT6800B single channel series is optional if you need GPIB interface.
* This information is subject to change without notice.

IT6800A/B Dimension figure





Unit: mm

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