IT6860A & IT6870A Dual-range Programmable DC Power Supply

IT6860A series (72~180W) programming DC power supply offers dual-range voltage switch for your choice, which can replace two ordinary ones, greatly saving your cost and operation space. At the same time, IT6860A supports panel List programming and software operation via computer to meet more communication demands. IT6860A series is suited for laboratory testing, online production test, maintenance testing, etc.

Applications

Laboratory testing, production line production testing, maintenance testing, etc.

Feature

- Dual range output
- Convenient data entry via knob or numerical key pad
- High accuracy and high resolution
- Remote sense
- Output voltage and current values accordance with procedure
- Adjust voltage and current via Knob
- Low ripple and low noise
- OVP, OTP
- Built-in RS232/USB/GPIB interface *1
- Monitor software via PC
- Support SCPI command, compatible IT6800 frame format protocol

*1 Only IT6800B dual range series have built-in GPIB communication interface

Model	Voltage	Current	Power	Interface
IT6861A	20V/8V	5A/9A	100W/72W	RS232/USB
IT6862A	32V/12V	3A/6A	96W/72W	RS232/USB
IT6863A	72V/32V	1.5A/3A	108W/96W	RS232/USB
IT6872A	35V/15V	4A/7A	140W/105W	RS232/USB
IT6873A	75V/32V	2A/4A	150W/128W	RS232/USB
IT6874A	150V/60V	1.2A/2A	180W/120W	RS232/USB

*The IT6800A dual range series is without GPIB interface. The remaining parameters are the same as the IT6800B series.
If needing GPIB interface, the IT6800B dual range series can be selected.

Dual-range Output

IT6860A series DC power supply offers high and low voltage range for your choice. When needing high voltage output, high voltage is optional, when needing high current, low voltage is optional.

Output timer Function

This 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~9999.9s or 0.1m~9999.9m.

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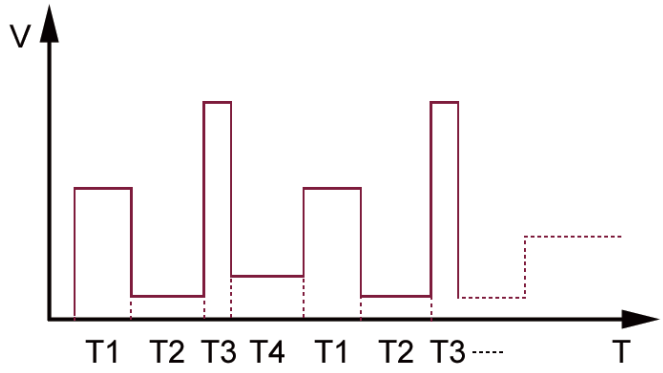
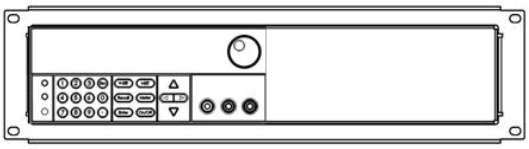
List Mode

List mode allows user to create a sequence of steps, store it into the power supply's nonvolatile memory and execute it. 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.

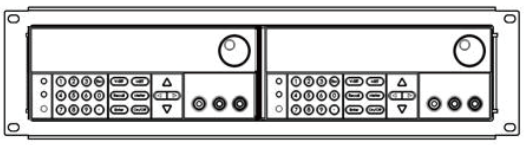


Remote Sense

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.

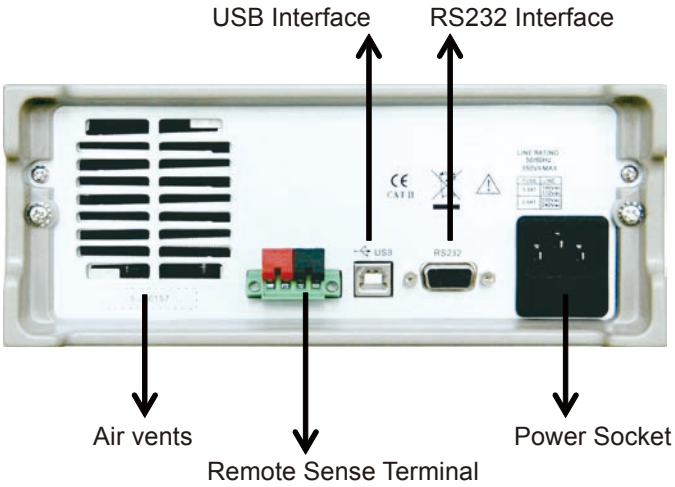


19" installation (One unit)



19" installation (Two units)

Rear Panel of IT6860A



*Compared with IT6860A series power supplies, IT6860B series has add GPIB interface besides built-in RS232 and USB interface.

Standard Accessories:

- Power Cord
- Test Report
- User Manual

Optional Accessories:

- IT-E151A Mounting Kit

IT6800A Specifications

		IT6861A	IT6862A	IT6863A
Rating	H file	0~20V,5A	0-32V,3A	0~72V,1.5A
(0°C~40°C)	L file	0~8V,9A	0-12V,6A	0~32V,3A
	Power	H:100W L:72W	H:96W L:72W	H:108W L:96W
Load regulation	Voltage	≤0.01%+4mV	≤0.01%+3mV	≤0.01%+3mV
±(%of output+offset)	Current	≤0.01%+2mA	≤0.01%+2mA	≤0.01%+2mA
Power regulation	Voltage	≤0.01%+4mV	≤0.01%+3mV	≤0.01%+3mV
±(%of output+offset)	Current	≤0.01%+2mA	≤0.01%+2mA	≤0.01%+2mA
Programmong resolution	Voltage	1mV	1mV	1mV
	Current	0.1mA	0.1mA	0.1mA
Readback value resolution	Voltage	1mV	1mV	1mV
	Current	0.1mA	0.1mA	0.1mA
Programmong accuracy	Voltage	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV
(Within 12 months) (25°C±5°C) ±(%of output+offset)	Current	≤0.1%+5mA	≤0.1%+5mA	≤0.1%+5mA
Readback accuracy	Voltage	≤0.04%+8mV	≤0.04%+8mV	≤0.04%+8mV
(Within 12 months) (25°C±5°C) ±(%of output+offset)	Current	≤0.1%+5mA	≤0.1%+5mA	≤0.1%+5mA
Ripple	Voltage	≤3mVp-p	≤4mVp-p	≤3mVp-p
(20Hz ~20MHz)	Current	≤9mArms	≤7mArms	≤6mArms
Rise Time	Voltage	≤90mS(10%-90%)	≤90mS(10%-90%)	≤90mS(10%-90%)
Fall time	Voltage	≤150m(90%-10%)	≤200m(90%-10%)	≤250m(90%-10%)
Dynamic recovery time	Voltage	50us (50%-100% load Recover to 75mV)	50us (50%-100% load Recover to 75mV)	50us (50%-100% load Recover to 75mV)
Size (mm)		214.5mm×88.2mm×354.6mm	214.5mm×88.2mm×354.6mm	214.5mm×88.2mm×354.6mm
Weight		8.5Kg	8.5Kg	8.5Kg

		IT6872A	IT6873A	IT6874A
Rating	H file	0-35V,4A	0-75V,2A	0-150V,1.2A
(0°C~40°C)	L file	0-15V,7A	0-32V,4A	0-60V,2A
	Power	H:140W L:105W	H:150W L:128W	H:180W L:120W
Load regulation	Voltage	≦0.01%+5mV	≦0.01%+4mV	≦0.01%+4mV
±(%of output+offset)	Current	≦0.01%+3mA	≦0.01%+2mA	≦0.01%+2mA
Power regulation	Voltage	≦0.01%+5mV	≦0.01%+4mV	≦0.01%+4mV
±(%of output+offset)	Current	≦0.01%+3mA	≦0.01%+2mA	≦0.01%+2mA
Programmong resolution	Voltage	1mV	1mV	1mV(<100V) 10mV(≧100V)
	Current	0.1mA	0.1mA	0.1mA
Readback value resolution	Voltage	1mV	1mV	1mV(<100V) 10mV(≧100V)
	Current	0.1mA	0.1mA	0.1mA
Programmong accuracy	Voltage	≤0.04%+8mV	≤0.04%+8mV	≦0.05%+20mV
(Within 12 months) (25°C±5°C) ±(%of output+offset)	Current	≤0.1%+5mA	≤0.1%+5mA	≤0.1%+5mA
Readback accuracy	Voltage	≤0.04%+8mV	≤0.04%+8mV	≦0.05%+20mV
(Within 12 months) (25°C±5°C) ±(%of output+offset)	Current	≤0.1%+5mA	≤0.1%+5mA	≤0.1%+5mA
Ripple	Voltage	≦3mVp-p/1mVrms	≦3mVp-p/1mVrms	≦5mVp-p and 1.5mVrms
(20Hz ~20MHz)	Current	＜6mArms	＜6mArms	＜6mArms
Rise Time	Voltage	≤90ms(10%-90%)	≤90ms10%-90%)	≤150ms(10%-90%)
Fall time	Voltage	<350ms	<450ms	≤2.5s(90%-10%)
Dynamic recovery time	Voltage	50us (50%-100% load Recover to 75mV)	50us (50%-100% load Recover to 75mV)	100us
Size (mm)		214.5mm×88.2mm×354.6mm	214.5mm×88.2mm×354.6mm	214.5mm×88.2mm×354.6mm
Weight		8.5Kg	8.5Kg	7.5kg

*This information is subject to change without notice

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