

IT6860A/B & IT6870A/B Dual-range Power Supply

IT6860 series are high performance single output dual range programmable DC power supplies. It built-in USB and RS232 interfaces, supporting fast and stable programming procedures. With high resolution of 1mV/0.1mA. They are designed to meet the needs of R&D design verification, production testing, QA verifications and other applications.



IT6860A

■ Features

- Dual range output
- Bright VFD display
- Convenient data entry via knob or numerical key pad
- High accuracy and high resolution
- Low ripple and low noise
- Intelligent fan control, energy conservation, noise reduction
- Output voltage and current values accordance with procedure
- Timer function (0.1~9999.9S)
- Built-in RS232/USB communication interface
- Support SCPI command, compatible IT6800 frame format protocol

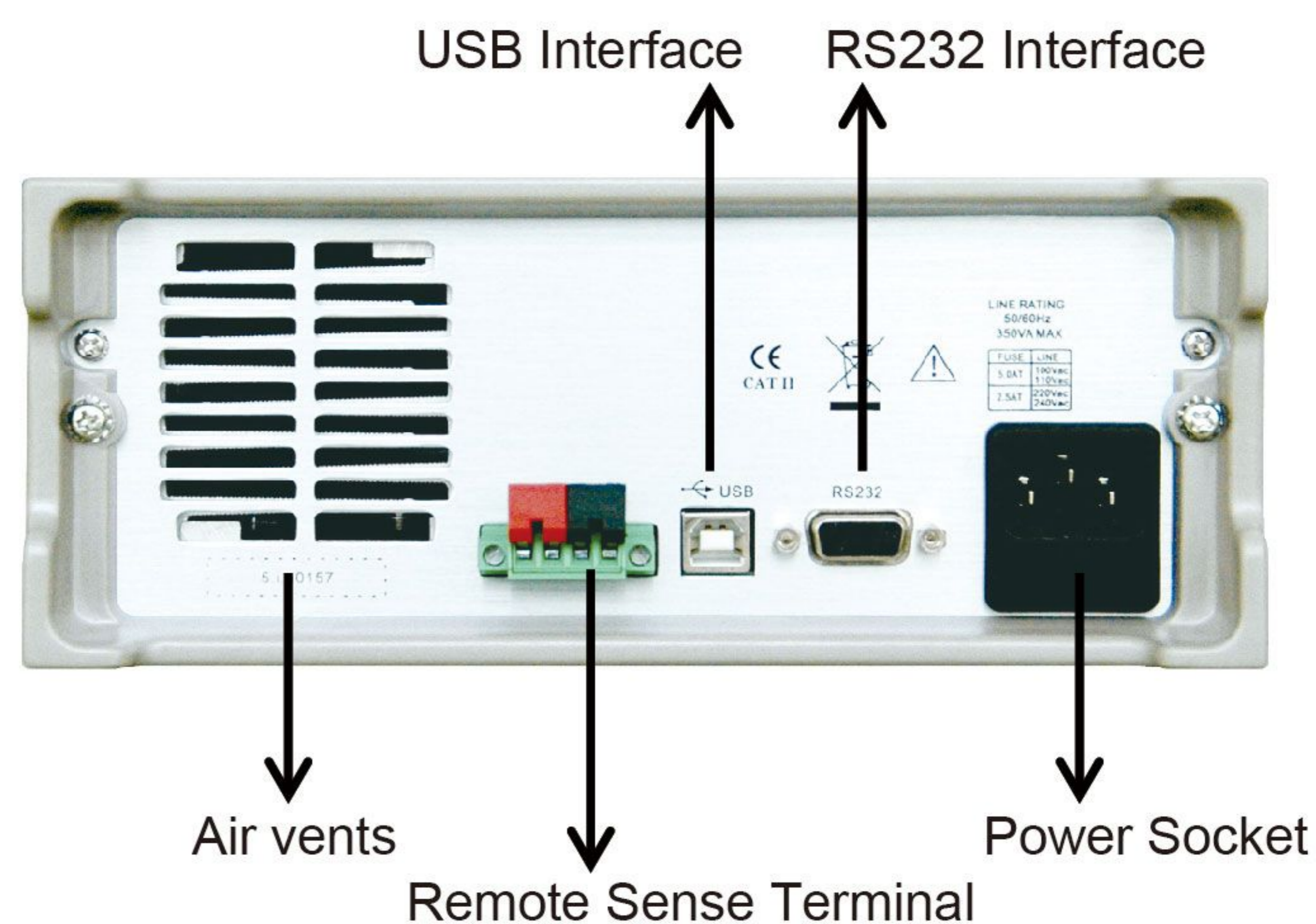
Dual-range Output

Take IT6862A as an example:

- High voltage range: 0-32V, 3A
- Low voltage range: 0-12V, 6A

IT6800A series power supplies give you the flexibility to select from dual output ranges. Normally, if user purchase a 32V/3A/96W power supply, the current working range is limited to 3A. But for IT6862A, user could get a high current working limitation by switch the working range. This feature greatly saves customer's cost.

Rear Panel Of IT6860A



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

Model	Voltage	Current
IT6861A	20V/8V	5A/9A
IT6862A	32V/12V	3A/6A
IT6863A	72V/32V	1.5A/3A
IT6872A	32V/15V	4A/7A
IT6873A	75V/32V	2A/4A
IT6874A	150V/60V	1.2A/2A

*IT6860B series power supplies have built-in GPIB, RS232 and USB interfaces

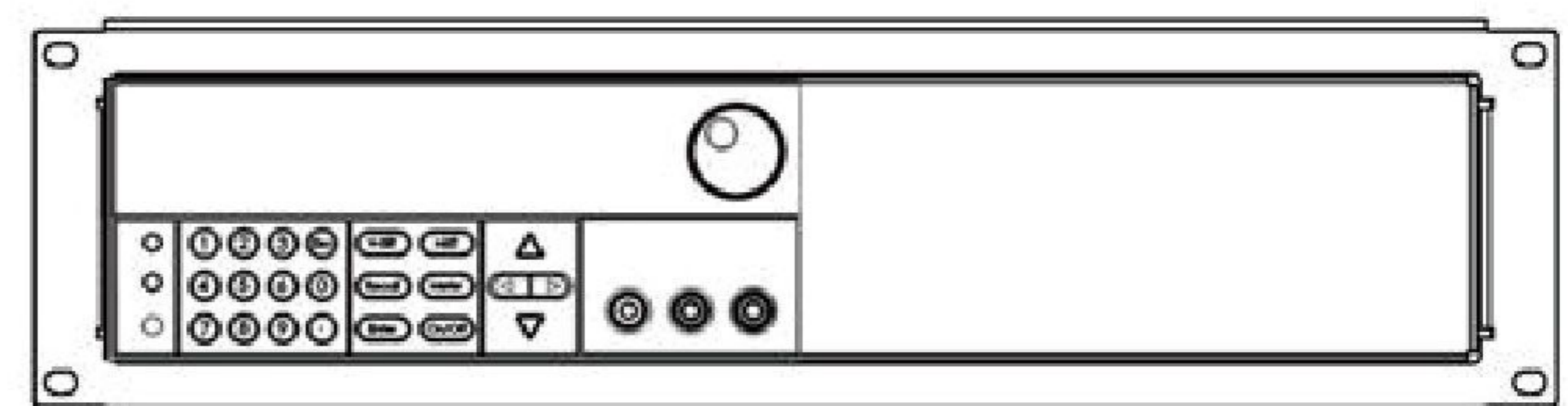


Specifications

		IT6861A	IT6862A	IT6863A	IT6872A	IT6873A	IT6874A
Output Ratings		0-20V,5A/0-8V,9A	0-32V,3A/0-12V,6A	0-72V,1.5A/0-32V,3A	0-35V,4A/0-15V,7A	0-75V,2A/0-32V,4A	0-150V 1,2A/0-60V 2A
Load Regulation	Voltage	$\leq 0.01\% + 4\text{mV}$	$\leq 0.01\% + 3\text{mV}$	$\leq 0.01\% + 3\text{mV}$	$\leq 0.01\% + 5\text{mV}$	$\leq 0.01\% + 4\text{mV}$	$\leq 0.01\% + 4\text{mV}$
	Current	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 3\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$
Line Regulation	Voltage	$\leq 0.01\% + 4\text{mV}$	$\leq 0.01\% + 3\text{mV}$	$\leq 0.01\% + 3\text{mV}$	$\leq 0.01\% + 5\text{mV}$	$\leq 0.01\% + 4\text{mV}$	$\leq 0.01\% + 4\text{mV}$
	Current	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 3\text{mA}$	$\leq 0.01\% + 2\text{mA}$	$\leq 0.01\% + 2\text{mA}$
Setup Resolution	Voltage	1mV	1mV	1mV	1mV	1mV	1mV(<100V) 10mV($\geq 100\text{V}$)
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
Read Back Resolution	Voltage	1mV	1mV	1mV	1mV	1mV	1mV(<100V) 10mV($\geq 100\text{V}$)
	Current	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA
Setup Accuracy	Voltage	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.05\% + 20\text{mV}$
	Current	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$
Read Back Accuracy	Voltage	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.04\% + 8\text{mV}$	$\leq 0.05\% + 20\text{mV}$
	Current	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$	$\leq 0.1\% + 5\text{mA}$
Ripple (20Hz-20MHz)	DMV	$\leq 2\text{mVp-p} / 0.5\text{mVrms}(20\text{V}/5\text{A})$	$\leq 3\text{mVp-p} / 0.5\text{mVrms}(32\text{V}/3\text{A})$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 5\text{mVp-p} / 1.5\text{mVrms}$
		$\leq 3\text{mVp-p} / 1\text{mVrms}(8\text{V}/9\text{A})$	$\leq 4\text{mVp-p} / 1\text{mVrms}(12\text{V}/6\text{A})$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 3\text{mVp-p} / 1\text{mVrms}$	$\leq 5\text{mVp-p} / 1.5\text{mVrms}$
	DMA	$< 9\text{ mArms}$	$< 7\text{mArms}$	$< 6\text{mArms}$	$< 6\text{mArms}$	$< 6\text{mArms}$	$< 6\text{mArms}$
	CMA	$< 1.5\mu\text{Arms}$	$< 1.5\mu\text{Arms}$	$< 1.5\mu\text{Arms}$	$< 1.5\mu\text{Arms}$	$< 1.5\mu\text{Arms}$	$< 1.5\mu\text{Arms}$
Up Time	10%-90%	$< 90\text{ms}$	$< 90\text{ms}$	$< 90\text{ms}$	$< 90\text{ms}$	$< 120\text{ms}$	$< 150\text{ms}$
Down Time	90%-10%	$< 150\text{ms}$	$< 200\text{ms}$	$< 250\text{ms}$	$< 350\text{ms}$	$< 450\text{ms}$	$< 2\text{s}$
Dynamic recovery time	Recovery 75mV	$< 50\mu\text{s}$	$< 50\mu\text{s}$	$< 50\mu\text{s}$	$< 50\mu\text{s}$	$< 50\mu\text{s}$	$< 100\mu\text{s}$
Dimension (W*H*D)	Size	214.5mm*88.2mm*354.6mm					

Output Timer Function

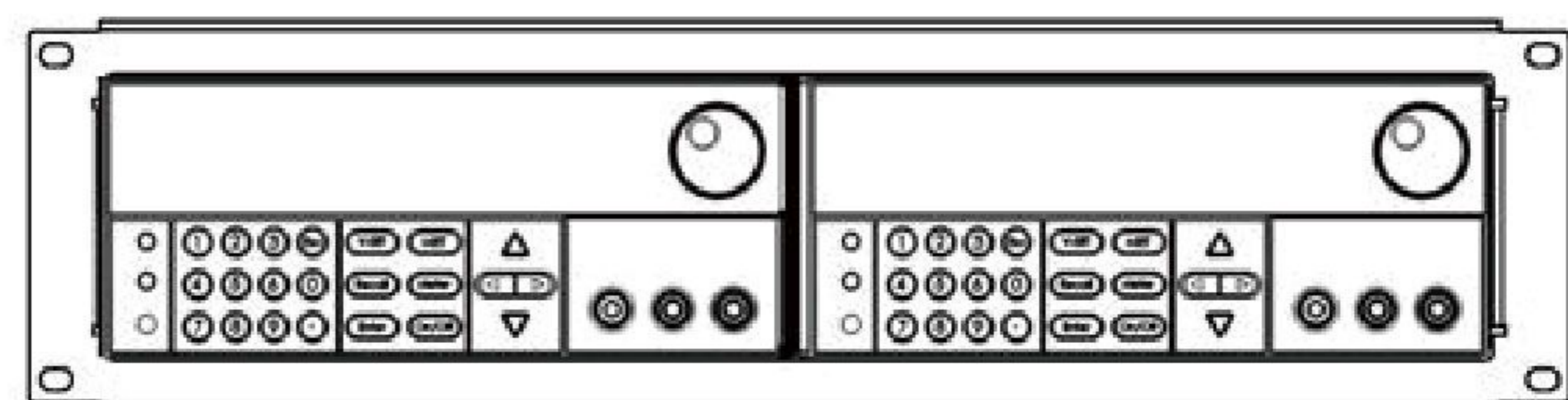
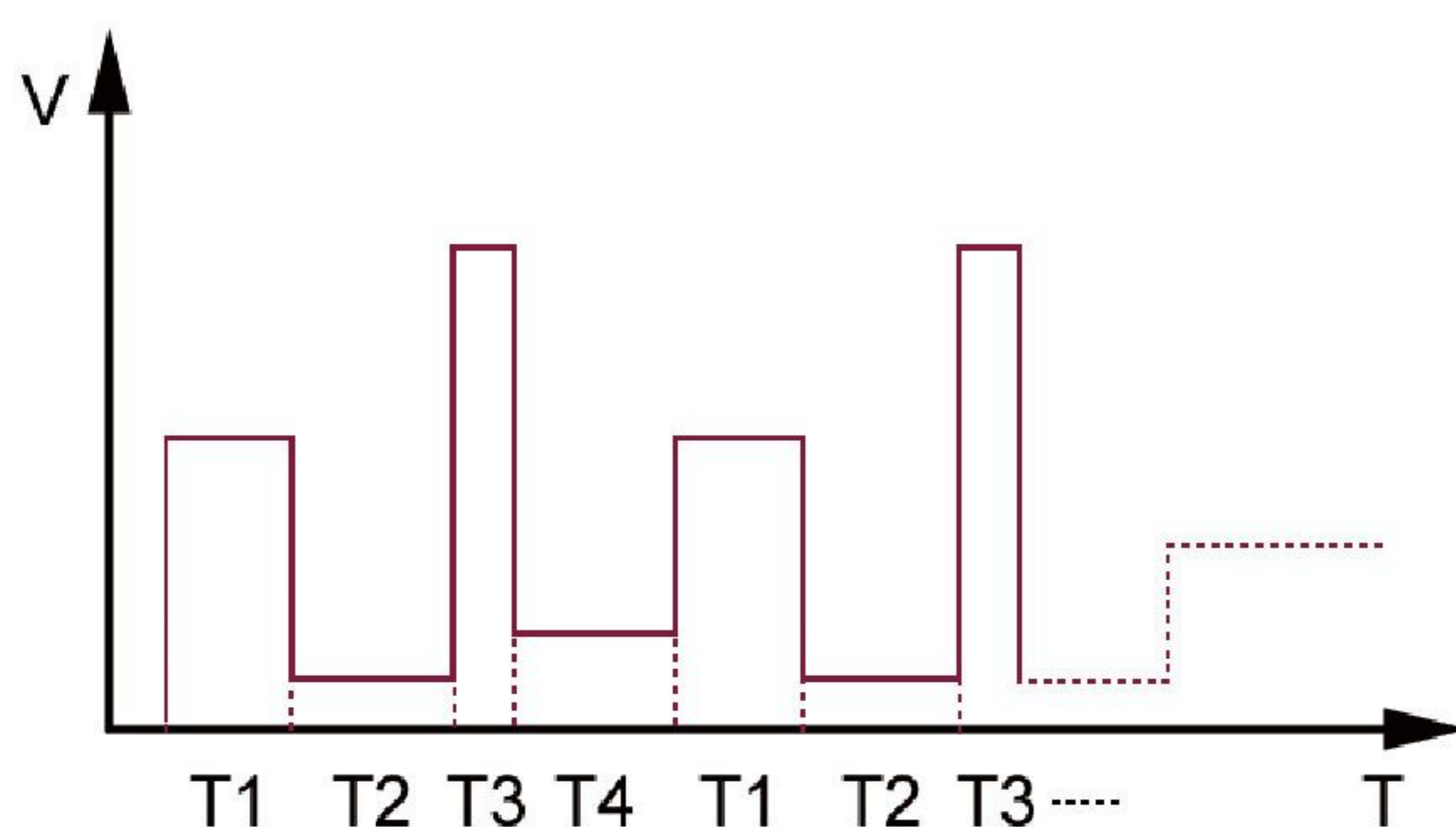
IT6860 series power supplies support output timer function. When you enable the function, the “Timer” indicator will lit on the VFD. When the output is “on”, the output will turn off automatically after the time elapsed



19" installation (One unit)

List Mode

List mode allows user to create a sequence of steps, store it into the power supply's non volatile 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.



19" installation (Two units)

Standard Accessories:

Power Cord

Test Report

User's Manual

Optional Accessories:

IT-E151 Mounting Kit

*Note: IT6860A series power supplies have built-in RS232 and USB interfaces.