

IT6700H High Voltage Wide Range Programmable DC Power Supply

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Applications

Battery fluctuation simulation test, battery charger, high voltage ultra-high speed diode, electrolytic capacitor, electromechanical control field and ATE test system

Feature

- Voltage up to 1200V
- VFD display
- High voltage high current models optional
- Output control via ON/OFF switch
- Safety terminal
- List mode, editable waveforms of voltage and current
- Remote sense
- Built-in RS232/USB/GPIB *1

*1: IT6722A is without GPIB interface

Battery fluctuation simulation test

Battery charging needs high-precision voltage and stable current output to simulate the battery charge and discharge process. IT6700H series can accurately describes the battery charge and discharge process, which is applied in areas need high voltage and low flow direct current, such as battery fluctuation simulation tests, battery chargers, high voltage ultra-high speed diodes, electrolytic capacitors, electromechanical control, and ATE test systems, etc.

IT6700H high voltage DC power supply support maximum output power 3000W, voltage up to 1200V. IT6700H series provide list mode, built-in RS232 / USB / GPIB communication interfaces, rich SCPI protocol to facilitate the configuration of a variety of intelligent test platforms.

Model	Voltage	Current	Power	Size
IT6722	80V	20A	400W	1/2 2U
IT6722A	80V	20A	400W	1/2 2U
IT6723	80V	40A	850W	1/2 2U
IT6723B	150V	20A	850W	1/2 2U
IT6723C	32V	110A	850W	1/2 2U
IT6723G	600V	5A	850W	1/2 2U
IT6723H	300V	10A	850W	1/2 2U
IT6724	80V	40A	1500W	1/2 2U
IT6724B	150V	20A	1500W	1/2 2U
IT6724C	32V	110A	1500W	1/2 2U
IT6724G	600V	5A	1500W	1/2 2U
IT6724H	300V	10A	1500W	1/2 2U
IT6726B	160V	40A	3kW	2U
IT6726C	32V	220A	3kW	2U
IT6726G	600V	10A	3kW	2U
IT6726H	300V	20A	3kW	2U
IT6726V	1200V	5A	3kW	2U

Small size abundant functions, more flexible

IT6700H is with small size, up to 3000W power with only 1/2 2U. It can be placed in the standard cabinet. Even for benchtop usage, it saves much space.

Voltage up to 1200V, reasonable design makes high voltage test more secure

IT6700H series supports voltage up to 1200V. High voltage is the basic requirement to the power supply in the fields of LED, battery, DC / DC converters and other industries. Except for mentioned industries above, IT6700H high voltage DC power supply series can also meet ultra-high voltage requirements of the special tests. Engineers always have concerns on the safety of high voltage testing. ITECH is with the design of security terminals and other details to ensure the safety of the test.

Ultra wide range design

The maximum power is not the maximum voltage multiplied by the maximum current. Take one of the models as an example, IT6726H maximum power is 3000W, the maximum voltage and current reach 300V and 20A, a model can replace 2 units or more general power supplies.

IT6700H Specifications

		IT6722A	IT6722	IT6723	IT6723B	IT6723C	IT6723G
Rated output (0~40 °C)	Voltage	0~80V	0~80V	0~80V	0~150V	0~32V	0~600V
	Current	0~20A	0~20A	0~40A	0~20A	0~110A	0~5A
	Power	400W	400W	850W	850W	850W	850W
Load regulation	Voltage	≤0.01%+5mV	≤0.01%+5mV	≤0.01%+10mV	≤0.01%+40mV	≤0.01%+5mV	≤0.01%+100mV
	Current	≤0.1%+5mA	≤0.1%+5mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA
Line regulation	Voltage	≤0.01%+2.5mV	≤0.01%+2.5mV	≤0.01%+10mV	≤0.01%+30mV	≤0.01%+5mV	≤0.01%+50mV
	Current	≤0.1%+2.5mA	≤0.1%+2.5mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA
Programming resolution	Voltage	10mV	10mV	10mV	100mV	10mV	100mV
	Current	10mA	10mA	10mA	10mA	10mA	10mA
Readback resolution	Voltage	10mV	10mV	10mV	100mV	10mV	100mV
	Current	10mA	10mA	10mA	10mA	10mA	10mA
Programming accuracy	Voltage	≤0.01%+10mV	≤0.01%+10mV	≤0.03%+20mV	≤0.03%+100mV	≤0.03%+10mV	≤0.03%+200mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+60mA	≤0.1%+20mA
Readback accuracy	Voltage	≤0.01%+20mV	≤0.01%+20mV	≤0.03%+20mV	≤0.03%+200mV	≤0.03%+20mV	≤0.03%+200mV
	Current	≤0.1%+20mA	≤0.1%+20mA	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+60mA	≤0.1%+20mA
Ripple	Voltage	≤50mVp-p	≤50mVp-p	≤100mVp-p	≤150mVp-p	≤100mVp-p	≤300mVp-p
	Current	≤15mA _{Arms}	≤15mA _{Arms}	≤50mA _{Arms}	≤30mA _{Arms}	≤150mA _{Arms}	≤30mA _{Arms}
Rise Time	No load	≤300ms	≤300ms	≤300ms	≤300ms	≤300ms	≤300ms
	Full load	≤1s	≤1s	≤500ms	≤1s	≤500ms	≤1s
Fall time	No load	≤500ms	≤500ms	≤5s	≤5s	≤5s	≤5s
	Full load	≤300ms	≤300ms	≤150ms	≤200ms	≤150ms	≤200ms
Size (mm)		214.5W×88.2H×354.6D	214.5W×88.2H×354.6D	214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D
Weight		2.5KG	2.5KG	6Kg	6Kg	6Kg	6Kg

		IT6723H	IT6724	IT6724B	IT6724C	IT6724G	IT6724H
Rated output (0~40 °C)	Voltage	0~300V	0~80V	0~150V	0~32V	0~600V	0~300V
	Current	0~10A	0~40A	0~20A	0~110A	0~5A	0~10A
	Power	850W	1500W	1500W	1500W	1500W	1500W
Load regulation	Voltage	≤0.01%+100mV	≤0.01%+10mV	≤0.01%+40mV	≤0.01%+5mV	≤0.01%+100mV	≤0.01%+100mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA
Line regulation	Voltage	≤0.01%+50mV	≤0.01%+10mV	≤0.01%+30mV	≤0.01%+5mV	≤0.01%+50mV	≤0.01%+50mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+50mA	≤0.1%+10mA	≤0.1%+10mA
Programming resolution	Voltage	100mV	10mV	100mV	10mV	100mV	100mV
	Current	10mA	10mA	10mA	10mA	10mA	10mA
Readback resolution	Voltage	100mV	10mV	100mV	10mV	100mV	100mV
	Current	10mA	10mA	10mA	10mA	10mA	10mA
Programming accuracy	Voltage	≤0.03%+200mV	≤0.03%+20mV	≤0.03%+100mV	≤0.03%+10mV	≤0.03%+200mV	≤0.03%+200mV
	Current	≤0.1%+20mA	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+60mA	≤0.1%+20mA	≤0.1%+20mA
Readback accuracy	Voltage	≤0.03%+200mV	≤0.03%+20mV	≤0.03%+200mV	≤0.03%+20mV	≤0.03%+200mV	≤0.03%+200mV
	Current	≤0.1%+20mA	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+60mA	≤0.1%+20mA	≤0.1%+20mA
Ripple	Voltage	≤250mVp-p	≤100mVp-p	≤150mVp-p	≤100mVp-p	≤300mVp-p	≤250mVp-p
	Current	≤40mA _{Arms}	≤50mA _{Arms}	≤30mA _{Arms}	≤150mA _{Arms}	≤30mA _{Arms}	≤40mA _{Arms}
Rise Time	No load	≤300ms	≤300ms	≤300ms	≤300ms	≤300ms	≤300ms
	Full load	≤1s	≤500ms	≤1s	≤500ms	≤1s	≤1s
Fall time	No load	≤5s	≤5s	≤5s	≤5s	≤5s	≤5s
	Full load	≤150ms	≤150ms	≤200ms	≤150ms	≤200ms	≤150ms
Size (mm)		214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D	214.5W×88.2H×445D
Weight		6Kg	6Kg	6Kg	6Kg	6Kg	6Kg

* AC power input level Working voltage for IT6723/IT6723B/IT6723C/IT6723G/IT6723H is 110V and 220V; Working voltage for IT6722/IT6722A/IT6724/IT6724B/IT6724C/IT6724H/IT6726H/IT6724G/IT6724V/IT6726G/IT6726V/IT6726B/IT6726C is 220V, so please pay attention to the working input voltage.

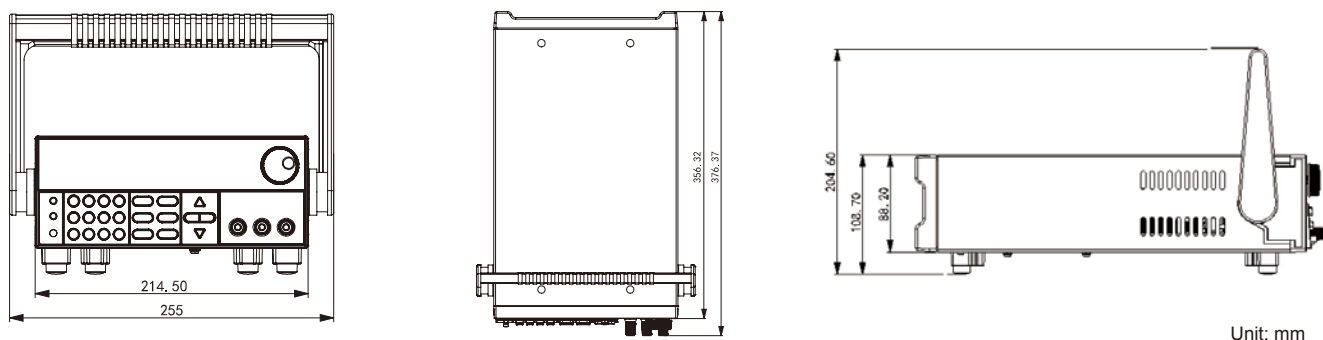
* AC power input level: Option Opt.01: 220VAC ± 10%, 47 to 63 Hz Option Opt.02: 110 VAC ± 10%, 47 to 63 Hz

* This information is subject to change without notice

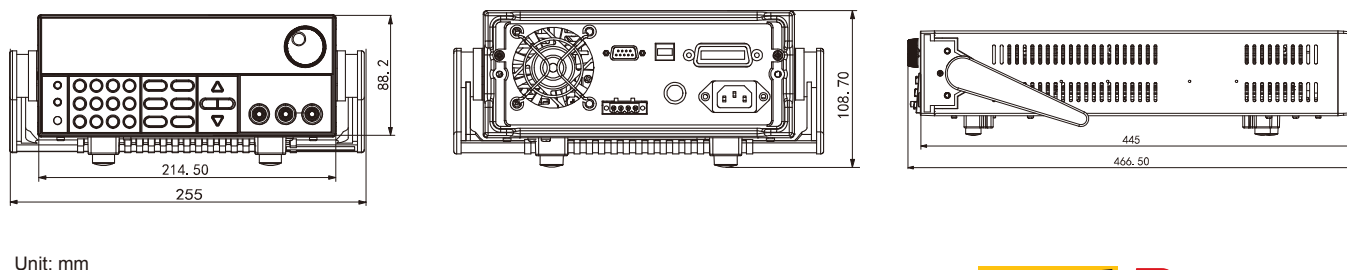
		IT6726B	IT6726G	IT6726H	IT6726V	IT6726C
Rated output (0~40 °C)	Voltage	160V	0~600V	0~300V	0~1200V	0~32V
	Current	40A	0~10A	0~20A	0~5A	0~220A
	Power	3000W	3000W	3000W	3000W	3000W
Load regulation	Voltage	≤0.01%+50mV	≤0.01%+100mV	≤0.01%+100mV	≤0.01%+200mV	≤0.01%+50mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+20mA	≤0.1%+30mA
Line regulation	Voltage	≤0.01%+40mV	≤0.01%+50mV	≤0.01%+50mV	≤0.01%+100mV	≤0.01%+50mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+20mA	≤0.1%+10mA
Programming resolution	Voltage	100mV	100mV	100mV	100mV	10mV
	Current	10mA	10mA	10mA	10mA	10mA
Readback resolution	Voltage	100mV	100mV	100mV	100mV	10mV
	Current	10mA	10mA	10mA	10mA	10mA
Programming accuracy	Voltage	≤0.03%+200mV	≤0.03%+200mV	≤0.03%+200mV	≤0.04%+400mV	≤0.03%+30mV
	Current	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+30mA	≤0.1%+20mA	≤0.2%+100mA
Readback accuracy	Voltage	≤0.03%+200mV	≤0.03%+200mV	≤0.03%+200mV	≤0.04%+400mV	≤0.03%+30mV
	Current	≤0.1%+40mA	≤0.1%+20mA	≤0.1%+30mA	≤0.1%+20mA	≤0.2%+100mA
Ripple	Voltage	≤250mVp-p	≤200mVp-p	≤300mVp-p	≤600mVp-p	≤200mVp-p
	Current	≤50mArms	≤50mArms	≤50mArms	≤50mArms	≤320mArms
Rise Time	No load	≤500mS	≤500mS	≤500mS	≤500mS	≤500mS
	Full load	≤2S	≤2S	≤2S	≤2S	≤2S
Fall time	No load	≤10S	≤10S	≤10S	≤10S	≤10S
	Full load	≤400mS	≤400mS	≤400mS	≤400mS	≤400mS
Size (mm)		482.5W×88.2H×548.9D				
Weight		16Kg	16Kg	16Kg	16Kg	16Kg

*This information is subject to change without notice

IT6722/IT6722ADimension figure



IT6723H/IT6724H/T6723GDimension figure



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