

Product Datasheet - Technical Specifications



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Product

IT6000D High Power Programmable
DC Power Supply



More Flexible
Various Application



IT6000D Series High Power Programmable DC Power Supply

APPLICATIONS

- Civil avionics testing
- High voltage UPS
- On-board charger
- Data Center
- Telecommunication power
- Server power supply
- Solar panel

Your Power Testing Solution



IT6000 Series

High Power Programmable DC Power Supply



IT6000D, single channel output programmable DC power supply, is applicable in laboratories and automatic test system to provide high-power and stable DC supply. The feature of autoranging output enables a wide range of voltage and current combinations at full power, unprecedentedly flexible.

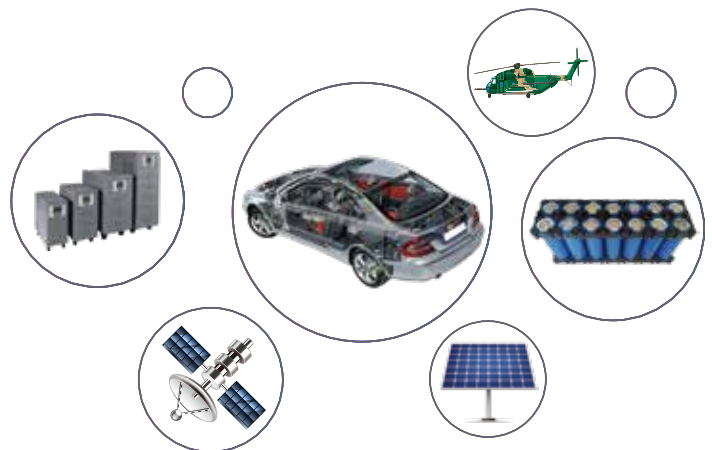
IT6000D Series has wide range of applications and its single unit provides power range of 5kW to 144kW, current up to 2040A, as well as its voltage up to 2250V. Besides, IT6000D provides multi built-in communication interfaces to simplify and accelerate the testing development. The compact 3U design saves rack space. Multi units of the same model can be paralleled easily to have higher power and the maximum power can reach up to 1.152 MW.

Features

- Master-slave parallel, the power can be paralleled up to 1.152 MW
- Current is up to 2040A by paralleling
- The adoption of high frequency switching structure supports the automatic switching between CV and CC
- Provides various protections: OVP, OCP, OPP, OTP, protection of power failure and UVP
- Supports data recording function, can continuously record the Max, Min, Average values of output voltage and current, and it can automatically execute data by sequence
- Support solar panel I-V curves simulation
- Power efficiency up to 92%
- High power density of 18kW in 3U
- Supports external data recording function, internal buffering, and the PC will periodically read data from the power supply, the shortest interval of sampling is 10μs
- Built-in communication interfaces of USB/CAN/LAN/Digital IO, and optional interfaces of GPIB, Analog and RS232
- Supports SCPI protocol, built-in Web server

Applications

- Civil avionics testing
- Data center
- Server power supply
- High voltage UPS
- Telecommunications power
- Solar battery panels
- On-board-charger
- Battery pack
- Energy storage system
- Electrical vehicle charging station
- Fuel battery
- Automatic Test Equipment
- High precision electroplating, Sputtering, surface treatment



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IT6000D Series High Power Programmable DC Power Supply

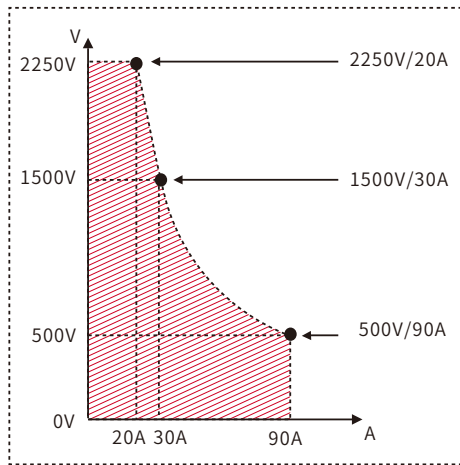
3U/18kW High power density

High power density of 18kW in 3U size, IT6000D series DC power supply has good capability of low output ripple and noise, power grid disturbance adjustment, load regulation and fast transient response. Standalone unit with voltage range of 80V-2250V, current of 450A-25A. Its wide range allows the devices to be used in every testing step of R&D, products testing and production.

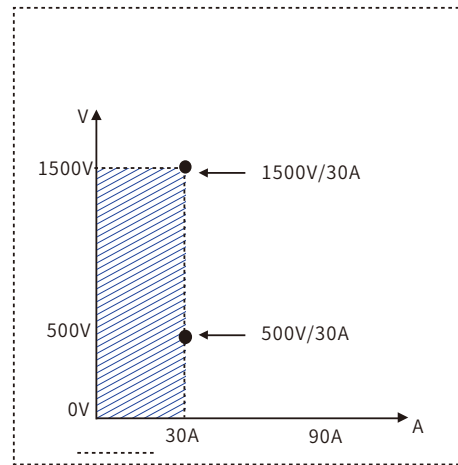


Output features

Comparing with the conventional design, the IT6000D has much better output range to satisfy various requirement. Featured as its wide auto range output, it can cover more applications. One standalone unit equals to 3-5 traditional power supplies and 3 units equals to 10-13 traditional power supplies. This makes it easier to build a system and save space at the same time.



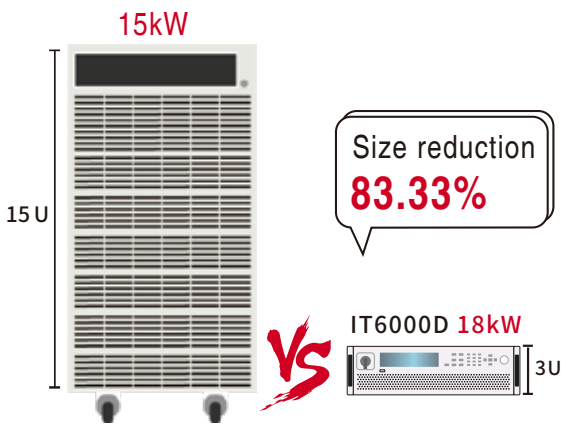
CP curve of IT6000D



Output feature of conventional power supply



Technology upgraded



V Voltage is extended to 187.5%

W Power is extended to 1152%

η Power efficiency up to 92%

♻️ Size is reduced to 1/6

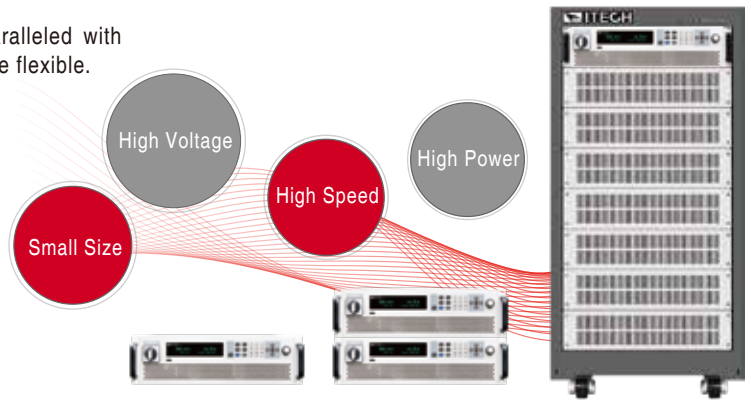
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IT6000D Series High Power Programmable DC Power Supply

Master-slave parallel operation

When the higher power is required, IT6000D series can be paralleled with several same model units. The system will be built faster and more flexible.

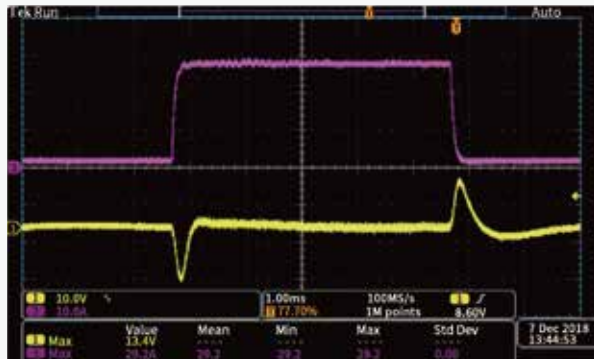
- Parallel unit up to 64 units
- Master / Slave parallel operation up to 1.152MW
- Parallel current up to 2040A
- Smart Master / Slave mode make the parallel connection easy and fast
- High power density for standalone unit and parallel connection
- Precise synchronization to ensure the whole power system synchronization after parallel connection.



Patented parallel technology

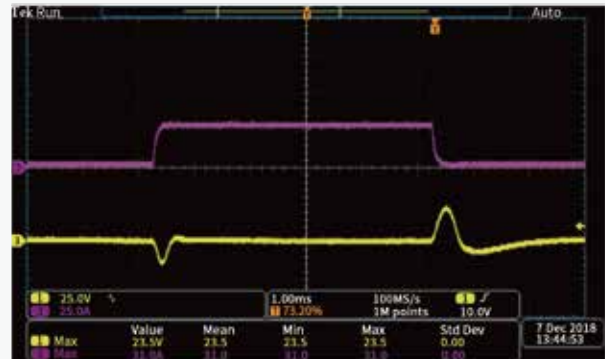
- IT6000 has adopted ITECH patented parallel technology
- All the function and performance will be the same as standalone unit
- No need to calibrate after paralleling
- Fiber transmission, good for anti-interference
- Digital paralleling, fully insulated, good for protecting DUT

2 units



IT6006D-500-40
Setting: voltage 100V current 56A
Load current: 60A

Standalone unit



IT6006D-500-40 500V/40A/6kW
Setting: voltage 100V current 28A
Load current: 30A

* Yellow waveform: output voltage Violet waveform: output current



From the above waveforms comparison:

we can see the paralleled IT6000D can output the same dynamic response waveform as the original single unit does, and show no-delay fast synchronized response.

Falling speed

No substantial changes comparing with single unit after parallel connection

Rising speed

Even faster rising speed, comparing with single unit after parallel connection

Dynamic response waveform

consistent with single unit waveform after parallel connection

Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

CC & CV priority

IT6000D series keep the CC/CV priority function, which fit different application requests such as fast speed or no overshoot, making the whole test more convenient.

Users can choose CC/CV loop response time and loop working mode to decide the output to be voltage high speed mode or current no overshoot mode. This unique function makes it suitable for the application of high power integrated circuit test, charging and discharging test, transient simulation test of automotive electronics etc.



Control loop CV priority mode

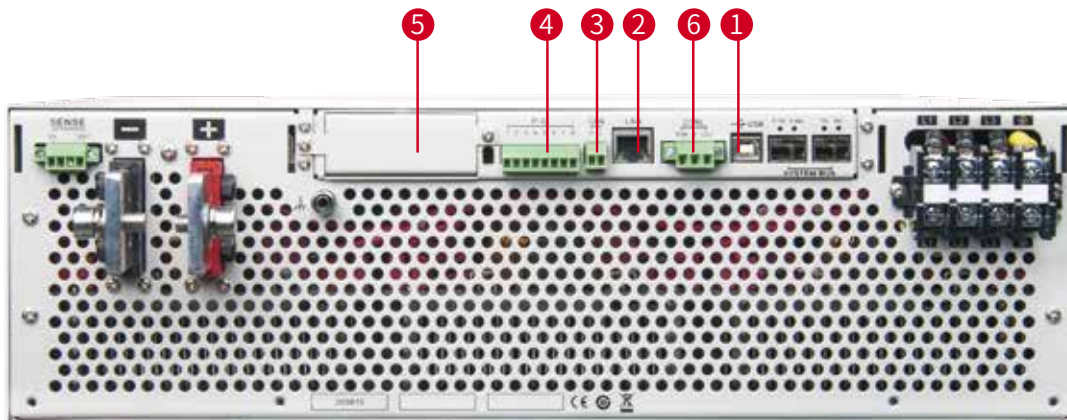
After setting the high-speed voltage mode, the voltage output faster and bring with an inrush current which is higher than the current range.




Control loop CC priority mode


battery charging and discharging, high speed seamless switch, effectively suppress the current overshoot.


Multiple interfaces





- 1** Standard USB interface



- 2** Standard LAN interface


- 3** Standard CAN interface


- 4** Standard I/O interface


- 5** Optional GPIB interface


- 6** External control interface

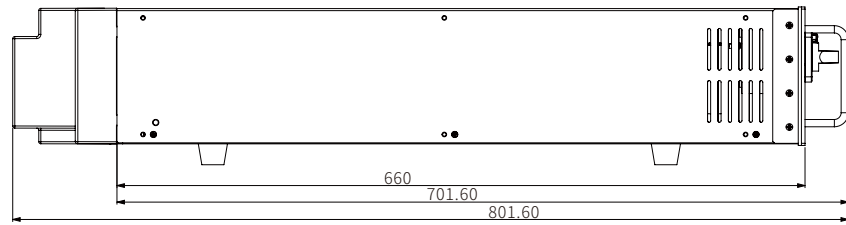
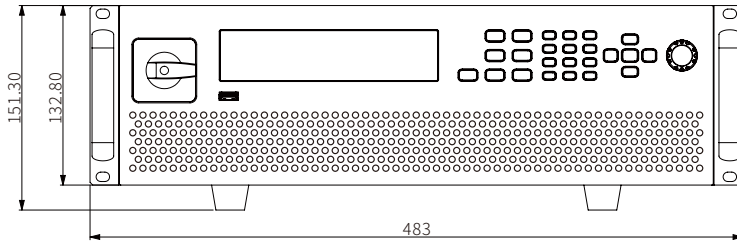


* Optional GPIB or Optional RS232 & Analog

Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

3U/18kW Standalone unit dimension



(Unit:mm)

Specification

	Model	Current	Power		Model	Current	Power		Model	Current	Power
80V	IT6005D-80-150	150A	5kW	300V	IT6006D-300-75	75A	6kW	500V	IT6006D-500-40	40A	6kW
	IT6010D-80-300	300A	10kW		IT6012D-300-150	150A	12kW		IT6012D-500-80	80A	12kW
	IT6015D-80-450	450A	15kW		IT6018D-300-225	225A	18kW		IT6018D-500-120	120A	18kW
	IT6030D-80-900	900A	30kW		IT6036D-300-450	450A	36kW		IT6036D-500-240	240A	36kW
	IT6045D-80-1350	1350A	45kW		IT6054D-300-675	675A	54kW		IT6054D-500-360	360A	54kW
	IT6060D-80-1800	1800A	60kW		IT6072D-300-900	900A	72kW		IT6072D-500-480	480A	72kW
	IT6075D-80-2040	2040A	75kW		IT6090D-300-1125	1125A	90kW		IT6090D-500-600	600A	90kW
	IT6090D-80-2040	2040A	90kW		IT6108D-300-1350	1350A	108kW		IT6108D-500-720	720A	108kW
	IT6105D-80-2040	2040A	105kW		IT6126D-300-1575	1575A	126kW		IT6126D-500-840	840A	126kW
	IT6120D-80-2040	2040A	120kW		IT6144D-300-1800	1800A	144kW		IT6144D-500-960	960A	144kW

	Model	Current	Power		Model	Current	Power		Model	Current	Power		
800V	IT6006D-800-25	25A	6kW	1500V	IT6018D-1500-40	40A	18kW	2250V	IT6018D-2250-25	25A	18kW		
	IT6012D-800-50	50A	12kW		IT6036D-1500-80	80A	36kW		IT6036D-2250-50	50A	36kW		
	IT6018D-800-75	75A	18kW		IT6054D-1500-120	120A	54kW		IT6054D-2250-75	75A	54kW		
	IT6036D-800-150	150A	36kW		IT6072D-1500-160	160A	72kW		IT6072D-2250-100	100A	72kW		
	IT6054D-800-225	225A	54kW		IT6090D-1500-200	200A	90kW		IT6090D-2250-125	125A	90kW		
	IT6072D-800-300	300A	72kW		IT6108D-1500-240	240A	108kW		IT6108D-2250-150	150A	108kW		
	IT6090D-800-375	375A	90kW		IT6126D-1500-280	280A	126kW		IT6126D-2250-175	175A	126kW		
	IT6108D-800-450	450A	108kW		IT6144D-1500-320	320A	144kW		IT6144D-2250-200	200A	144kW		
	IT6126D-800-525	525A	126kW										
	IT6144D-800-600	600A	144kW										

*This information is subject to change without notice.

Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

Specification

		IT6005D-80-150	IT6010D-80-300	IT6015D-80-450
Rated Value Range (0°C~40°C)	Output Voltage	0~80V	0~80V	0~80V
	Output Current	0~150A	0~300A	0~450A
	Output Power	0~5000W	0~10000W	0~15000W
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%FS	≤0.01%FS	≤0.01%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Load Regulation ±(% of Output+Offset)	Voltage	≤0.02%FS	≤0.02%FS	≤0.02%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Programming Resolution	Voltage	0.001V	0.001V	0.001V
	Current	0.01A	0.01A	0.01A
	power	0.001kW	0.001kW	0.001kW
ReadBack Resolution	Voltage	0.001V	0.001V	0.001V
	Current	0.01A	0.01A	0.01A
	power	0.001kW	0.001kW	0.001kW
Programming Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
ReadBack Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
Ripple (20Hz ~20MHz)	Voltage	≤32mVpp(MAX: ≤80mVpp)	≤32mVpp(MAX: ≤80mVpp)	≤32mVpp(MAX: ≤80mVpp)
	Current	≤0.1%FS RMS	≤0.1%FS RMS	≤0.1%FS RMS
Rise Time (no load)	Voltage	≤15ms	≤15ms	≤15ms
Rise Time (full load)	Voltage	≤30ms	≤30ms	≤30ms
Fall Time (no load)	Voltage	≤1s	≤1s	≤1s
Fall Time (full load)	Voltage	≤100ms	≤100ms	≤100ms
Dynamic Response Time	Voltage	≤2ms	≤2ms	≤2ms
AC Input	voltage	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)
	Frequency	47Hz ~ 63Hz	47Hz ~ 63Hz	47Hz ~ 63Hz
Setup Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02%+0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Setup Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02%+0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02%+0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02%+0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Efficiency		~90%	~90%	~90%
Sense Compensating Voltage		2V	2V	2V
Programming Response Time		2mS	2mS	2mS
Power Factor		0.99	0.99	0.99
Max. Input Current		L1,L2/17A;L3/0A	L1,L2/17A;L3/29A	28.42A
Max. Input Apparent Power		5.6kVA	11.2kVA	16.8kVA
Storage Temperature		-10°C ~ 70°C	-10°C ~ 70°C	-10°C ~ 70°C
Protective Function		OVP/OCPP/OPP/OTP/Vsense reverse protection	OVP/OCPP/OPP/OTP/Vsense reverse protection	OVP/OCPP/OPP/OTP/Vsense reverse protection
Operating Temperature		0 ~ 50°C	0 ~ 50°C	0 ~ 50°C
Dimension(mm)		483W*801.61D*151.3H	483W*801.61D*151.3H	483W*801.61D*151.3H
Net Weight		28KG	34KG	40KG

*This information is subject to change without notice.

Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

Specification

		IT6006D-300-75	IT6012D-300-150	IT6018D-300-225
Rated Value Range (0°C~40°C)	Output Voltage	0~300V	0~300V	0~300V
	Output Current	0~75A	0~150A	0~225A
	Output Power	0~6000W	0~12000W	0~18000W
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%FS	≤0.01%FS	≤0.01%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Load Regulation ±(% of Output+Offset)	Voltage	≤0.02%S	≤0.02%S	≤0.02%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Programming Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.01A	0.01A
	power	0.001kW	0.001kW	0.001kW
ReadBack Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.01A	0.01A
	power	0.001kW	0.001kW	0.001kW
Programming Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
ReadBack Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
Ripple (20Hz ~20MHz)	Voltage	≤120mVpp(MAX: ≤300mVpp)	≤120mVpp(MAX: ≤300mVpp)	≤120mVpp(MAX: ≤300mVpp)
	Current	≤0.1%FS RMS	≤0.1%FS RMS	≤0.1%FS RMS
Rise Time (no load)	Voltage	≤15ms	≤15ms	≤15ms
Rise Time (full load)	Voltage	≤30ms	≤30ms	≤30ms
Fall Time (no load)	Voltage	≤1s	≤1s	≤1s
Fall Time (full load)	Voltage	≤100ms	≤100ms	≤100ms
Dynamic Response Time	Voltage	≤2ms	≤2ms	≤2ms
	Current	≤2ms	≤2ms	≤2ms
AC Input	voltage	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)
	Frequency	47Hz~63Hz	47Hz~63Hz	47Hz~63Hz
Setup Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Setup Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Efficiency		~92%	~92%	~92%
Sense Compensating Voltage		≤3V	≤3V	≤3V
Programming Response Time		2mS	2mS	2mS
Power Factor		0.99	0.99	0.99
Max. Input Current		L1,L2/20A;L3/0A	L1,L2/20A;L3/34A	33.37A
Max. Input Apparent Power		6.6kVA	12.8kVA	19.8kVA
Storage Temperature		-10°C~70°C	-10°C~70°C	-10°C~70°C
Protective Function		OVP、OCp、OPP、OTP、Vsense反接保护	OVP、OCp、OPP、OTP、Vsense反接保护	OVP、OCp、OPP、OTP、Vsense反接保护
Operating Temperature		0~50°C	0~50°C	0~50°C
Dimension(mm)		483mm(W)*801.61mm(D)*151.3mm(H)	483mm(W)*801.61mm(D)*151.3mm(H)	483mm(W)*801.61mm(D)*151.3mm(H)
Net Weight		20KG	30KG	40KG

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Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

Specification

		IT6006D-500-40	IT6012D-500-80	IT6018D-500-120
Rated Value Range (0°C~40°C)	Output Voltage	0~500V	0~500V	0~500V
	Output Current	0~40A	0~80A	0~120A
	Output Power	0~6000W	0~12000W	0~18000W
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%FS	≤0.01%FS	≤0.01%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Load Regulation ±(% of Output+Offset)	Voltage	≤0.02%FS	≤0.02%FS	≤0.02%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Programming Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.001A	0.01A
	power	0.001kW	0.001kW	0.001kW
Readback Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.001A	0.01A
	power	0.001kW	0.001kW	0.001kW
Programming Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
ReadBack Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
Ripple (20Hz -20MHz)	Voltage	≤200mVpp(MAX: ≤500mVpp)	≤200mVpp(MAX: ≤500mVpp)	≤200mVpp(MAX: ≤500mVpp)
	Current	≤0.1%FS RMS	≤0.1%FS RMS	≤0.1%FS RMS
Rise Time (no load)	Voltage	≤15ms	≤15ms	≤15ms
Rise Time (full load)	Voltage	≤30ms	≤30ms	≤30ms
Fall Time (no load)	Voltage	≤1s	≤1s	≤1s
Fall Time (full load)	Voltage	≤100ms	≤100ms	≤100ms
Dynamic Response Time	Voltage	≤2ms	≤2ms	≤2ms
AC Input	voltage	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)
	Frequency	47Hz ~ 63Hz	47Hz ~ 63Hz	47Hz ~ 63Hz
Setup Stability-30min (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Setup Stability-8h (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-30min (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-8h (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Efficiency		~92%	~92%	~92%
Sense Compensating Voltage		≤5V	≤5V	≤5V
Programming Response Time		2mS	2mS	2mS
Power Factor		0.99	0.99	0.99
Max. Input Current		L1,L2/20A;L3/0A	L1,L2/20A;L3/34A	33.37A
Max. Input Apparent Power		6.6kVA	12.8kVA	19.8kVA
Storage Temperature		-10°C ~ 70°C	-10°C ~ 70°C	-10°C ~ 70°C
Protective Function		OVP/OCP/OPP/OTP/Vsense reverse protection	OVP/OCP/OPP/OTP/Vsense reverse protection	OVP/OCP/OPP/OTP/Vsense reverse protection
Operating Temperature		0~50°C	0~50°C	0~50°C
Dimension(mm)		483W*801.61D*151.3H	483W*801.61D*151.3H	483W*801.61D*151.3H
Net weight		28KG	34KG	40KG

*This information is subject to change without notice.

Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

Specification

		IT6006D-800-25	IT6012D-800-50	IT6018D-800-75
Rated Value Range (0°C~40°C)	Output Voltage	0~800V	0~800V	0~800V
	Output Current	0~25A	0~50A	0~75A
	Output Power	0~6000W	0~12000W	0~18000W
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%FS	≤0.01%FS	≤0.01%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Load Regulation ±(% of Output+Offset)	Voltage	≤0.02%S	≤0.02%FS	≤0.02%FS
	Current	≤0.05%FS	≤0.05%FS	≤0.05%FS
Programming Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.001A	0.001A
	power	0.001kW	0.001kW	0.001kW
ReadBack Resolution	Voltage	0.01V	0.01V	0.01V
	Current	0.001A	0.001A	0.001A
	power	0.001kW	0.001kW	0.001kW
Programming Accuracy (Within 12 months -25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
ReadBack Accuracy (Within 12 months -25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
Ripple (20Hz -20MHz)	Voltage	≤800mVpp(MAX: ≤1.2Vpp)	≤800mVpp(MAX: ≤1.2Vpp)	≤320mVpp(MAX: ≤800mVpp)
	Current	≤0.1%FS RMS	≤0.1%FS RMS	≤0.1%FS RMS
Rise Time (no load)	Voltage	≤15ms	≤15ms	≤15ms
Rise Time (full load)	Voltage	≤30ms	≤30ms	≤30ms
Fall Time (no load)	Voltage	≤1s	≤1s	≤1s
Fall Time (full load)	Voltage	≤100ms	≤100ms	≤100ms
Dynamic Response Time	Voltage	≤2ms	≤2ms	≤2ms
	voltage	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)
AC Input	Frequency	47Hz ~ 63Hz	47Hz ~ 63Hz	47Hz ~ 63Hz
Setup Stability-30min (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02%+0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Setup Stability-8h (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02%+0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-30min (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02%+0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-8h (% of Output +Offset)	Voltage	≤0.02%+0.02%FS	≤0.02%+0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Efficiency		~92%	~92%	~92%
Sense Compensating Voltage		≤8V	≤8V	≤8V
Programming Response Time		2mS	2mS	2mS
Power Factor		0.99	0.99	0.99
Max. Input Current		L1,L2/20A;L3/0A	L1,L2/20A;L3/34A	33.37A
Max. Input Apparent Power		6.6kVA	13.2kVA	19.8kVA
Storage Temperature		-10°C ~ 70°C	-10°C ~ 70°C	-10°C ~ 70°C
Protective Function		OVP/OCPP/OPP/OTP/Vsense reverse protection	OVP/OCPP/OPP/OTP/Vsense reverse protection	OVP/OCPP/OPP/OTP/Vsense reverse protection
Operating Temperature		0~50°C	0~50°C	0~50°C
Dimension(mm)		483W*801.61D*151.3H	483W*801.61D*151.3H	483W*801.61D*151.3H
Net Weight		28KG	34KG	40KG

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Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

Specification

		IT6018D-1500-40	IT6018D-2250-25
Rated Value Range (0°C~40°C)	Output Voltage	0~1500V	0~2250V
	Output Current	0~40A	0~25A
	Output Power	0~18000W	0~18000W
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%FS	≤0.01%FS
	Current	≤0.05%FS	≤0.05%FS
Load Regulation ±(% of Output+Offset)	Voltage	≤0.02%FS	≤0.02%FS
	Current	≤0.05%FS	≤0.05%FS
Programming Resolution	Voltage	0.1V	0.1V
	Current	0.001A	0.001A
	power	0.001kW	0.001kW
ReadBack Resolution	Voltage	0.1V	0.1V
	Current	0.001A	0.001A
	power	0.001kW	0.001kW
Programming Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
ReadBack Accuracy (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
	Power	≤0.5% + 0.5%FS	≤0.5% + 0.5%FS
Ripple (20Hz -20MHz)	Voltage	≤600mVpp(MAX: ≤1500mVpp)	≤900mVpp(MAX: ≤2250mVpp)
	Current	≤0.1%FS RMS	≤0.1%FS RMS
Rise Time (no load)	Voltage	≤15ms	≤15ms
Rise Time (full load)	Voltage	≤30ms	≤30ms
Fall Time (no load)	Voltage	≤1s	≤1s
Fall Time (full load)	Voltage	≤100ms	≤100ms
Dynamic Response Time	Voltage	≤2ms	≤2ms
	voltage	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)	198V ~ 264V (Decrease 50%) 342V ~ 528V (3P4W)
AC Input	Frequency	47Hz ~ 63Hz	47Hz ~ 63Hz
Setup Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Setup Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-30min (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Readback Stability-8h (% of Output +Offset)	Voltage	≤0.02% + 0.02%FS	≤0.02% + 0.02%FS
	Current	≤0.1% + 0.1%FS	≤0.1% + 0.1%FS
Efficiency		~92%	~92%
Sense Compensating Voltage		≤15V	≤22.5V
Programming Response Time		2mS	2mS
Power Factor		0.99	0.99
Max. Input Current		33.37A	33.37A
Max. Input Apparent Power		19.8kVA	19.8kVA
Storage Temperature		-10°C ~ 70°C	-10°C ~ 70°C
Protective Function		OVP/OCP/OPP/OTP/Vsense reverse protection	OVP/OCP/OPP/OTP/Vsense reverse protection
Operating Temperature		0~50°C	0~50°C
Dimension(mm)		483W*801.61D*151.3H	483W*801.61D*151.3H
Net Weight		40KG	40KG

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