ITECH

YOUR POWER TESTING SOLUTION

## Product

IT6000D High Power Programmable
DC Power Supply


# 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.

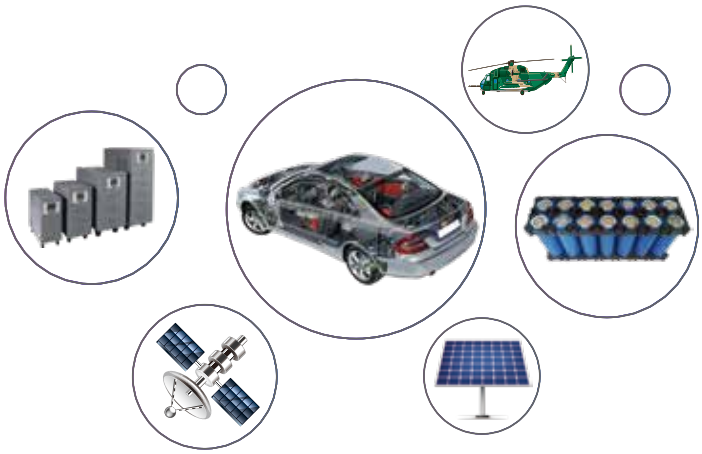
IT6000D series Programmable DC Power Supply has a wide range of applications, adopts the third-generation SiC technology, the voltage range is up to 2250V, and the current can reach up to 8000A after master-slave paralleling. Besides, IT6000D DC Power Supply provides multi built-in communication interfaces 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 2 MW.

## Features

- High power density up to 18kW in compact 3U rack space, expandable up to 2 MW by paralleling
- Output voltage up to 2250V
- Output current up to 8000A
- Adopts third-generation SiC technology
- 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
- Power efficiency up to 92%
- 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
- Supports external data logging functionality, enabling real-time data storage via USB drive insertion
- Built-in 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

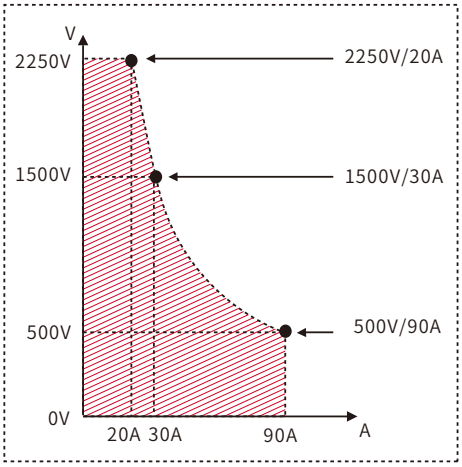


## 3U/18kW High power density

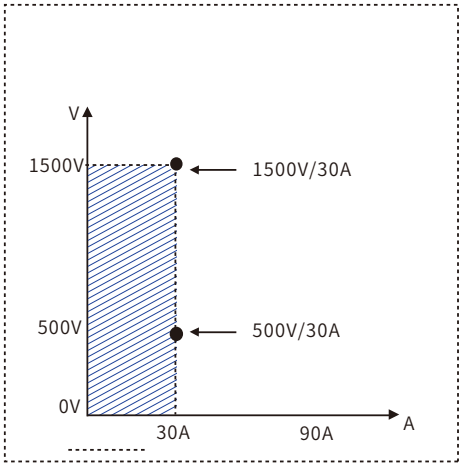
High power density of 18kW in 3U size, IT6000D series DC power supply has good capability of low output ripple and noise, power grid disturbance adjustment, load regulation and fast transient response. Standalone unit with voltage range of 80V-2250V, current of 450A-25A. Its wide range allows the devices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

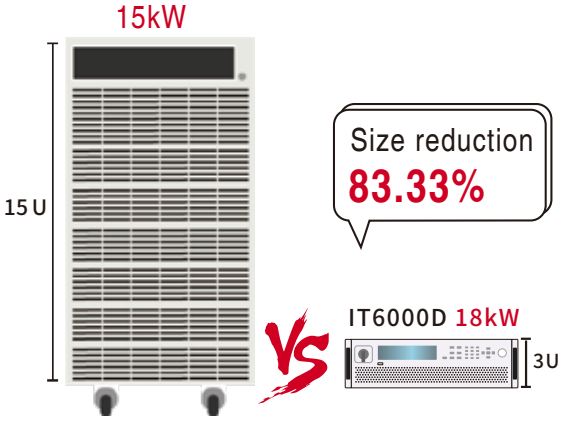



CP curve of IT6000D




Output feature of conventional power supply

## Technology upgraded




- Voltage is extended to 187.5%
- Power is extended to 1152%
- Power efficiency up to 92%
- Size is reduced to 1/6

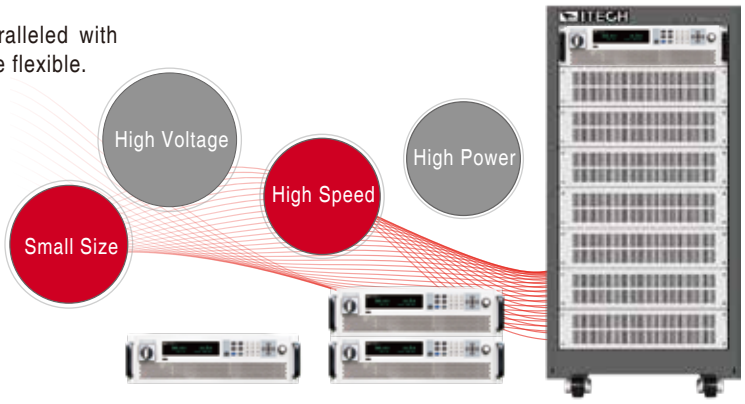
# Your Power Testing Solution

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.

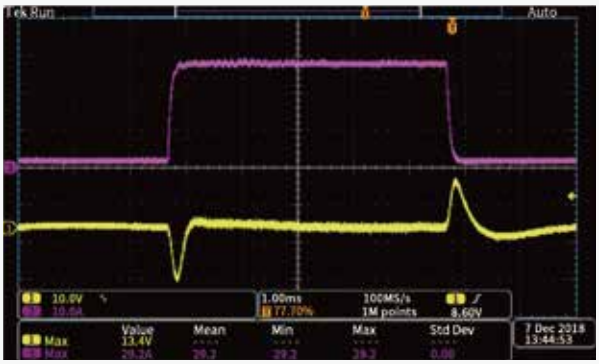
- Parallel unit up to 64 units
- Master / Slave parallel operation up to 2MW
- Parallel current up to 2040A
- Smart Master / Slave mode make the parallel connection easy and fast
- High power density for standalone unit and parallel connection
- Precise synchronization to ensure the whole power system synchronization after parallel connection.




## Patented parallel technology

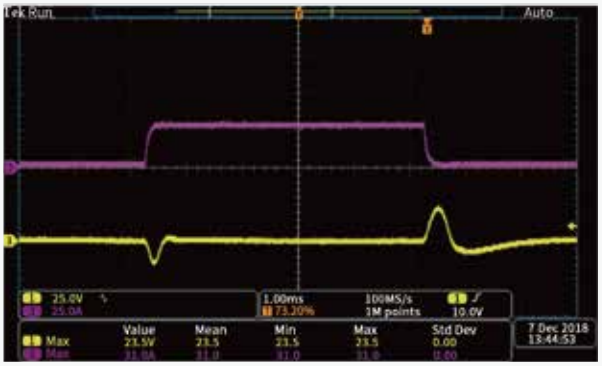
- All the function and performance will be the same as standalone unit
- No need to calibrate after paralleling
- Fiber transmission, good for anti-interference
- Digital paralleling, fully insulated, good for protecting DUT

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

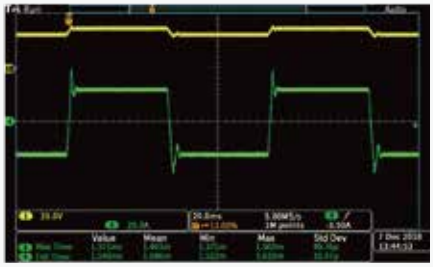
**Rising speed** — Even faster rising speed, comparing with single unit after parallel connection

**Dynamic response waveform** — consistent with single unit waveform after parallel connection

## 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.

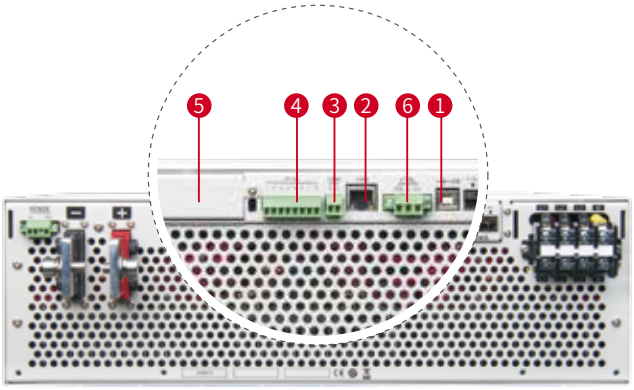
| Category | Model | Specification | Description |
|---|---|---|---|
| Accessories for parallel connection | IT-E510-15U* | 15U unit，grey | 800mm X 550mm X907.64mm |
| | IT-E511-15U* | 15U unit，black | 800mm X 550mm X907.64mm |
| | IT-E510-27U* | 27U unit，grey | 800mm X 600mmX 1441.41mm |
| | IT-E511-27U* | 27U unit，black | 800mm X 600mmX 1441.41mm |
| | IT-E510-37U* | 37U unit，grey | 800mm X 600mm X 1885.91mm |
| | IT-E511-37U* | 37U unit，black | 800mm X 600mm X 1885.91mm |
| | IT-E168 | optical fiber kit for parallel connection | for parallel communication between single units |
| | IT-E169 | Optical fiber kit for parallel connection | for parallel communication between cabinets |
| Anti-reverse protection unit | IT-E165A-250 | 750V/250A | Reverse polarity protection |
| | IT-E165A-400 | 750V/400A | Reverse polarity protection |
| | IT-E165A-500 | 900V/400A | Reverse polarity protection |
| | IT-E165B | Anti electromotive force protection unit | Avoid current back flow |
| Other accessories | IT-E258-15U<br>IT-E258E-15U<br>IT-E258U-15U | 5m power cord for 15U unit | Applied for Europe（-E）or United States（-U） or other area |
| | IT-E258-27U<br>IT-E258E-27U<br>IT-E258U-27U | 5m power cord for 27U unit | Applied for Europe（-E）or United States（-U） or other area |
| | IT-E258-37U<br>IT-E258E-37U<br>IT-E258U-37U | 5m power cord for 37U unit | Applied for Europe（-E）or United States（-U） or other area |
| | IT-E166/IT-E176-grey | GPIB communication card | |
| | IT-E167/IT-E177-grey | RS232 & analog interface card | |
| Test software | BSS2000 | Battery simulation software | Basic BSS2000/ Advanced BSS2000 Pro/Multi-channel BSS2000M |
| | SAS1000 | Solar array simulation software | SAS1000L (<15kW) / SAS1000 / Multi-channel SAS1000M |
| | FCS3000 | Fuel cell simulation software | FCS3000 |

* Contact us for details

# Your Power Testing Solution

IT6000D Series High Power Programmable DC Power Supply

## Multiple interfaces




1 Standard USB interface

2 Standard LAN interface


3 Standard CAN interface


4 Standard I/O interface

5 Optional RS232 &Analog or GPIB

6 External control interface

## 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.

## Specification

| | | IT6005D-80-150 | IT6010D-80-300 | IT6015D-80-450 |
|---|---|---|---|---|
| Rated Value Range (0 ℃-50 ℃) | 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 Offset) | Voltage | ≤0.01%FS | ≤0.01%FS | ≤0.01%FS |
| | Current | ≤0.05%FS | ≤0.05%FS | ≤0.05%FS |
| Load Regulation ±(%of 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℃±5℃) ±(%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℃±5℃) ±(%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: ≤200mVpp) | ≤120mVpp(MAX: ≤200mVpp) | ≤120mVpp(MAX: ≤200mVpp) |
| | 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 {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} |
| | 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 | | ≤5V | ≤5V | ≤5V |
| 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℃～70℃ | -10℃～70℃ | -10℃～70℃ |
| 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℃ | 0～50℃ | 0～50℃ |
| Dimension(mm) | | 483W*801.61D*151.3H | 483W*801.61D*151.3H | 483W*801.61D*151.3H |
| Net Weight | | 20KG | 30KG | 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℃-50℃) | 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 Offset) | Voltage | ≤0.01%FS | ≤0.01%FS | ≤0.01%FS |
| | Current | ≤0.05%FS | ≤0.05%FS | ≤0.05%FS |
| Load Regulation ±(%of 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 | 0.01A | 0.01A | 0.01A |
| | power | 0.001kW | 0.001kW | 0.001kW |
| ReadBack Resolution | Voltage | 0.01V | 0.01V | 0.01V |
| | Current | 0.01A | 0.01A | 0.01A |
| | power | 0.001kW | 0.001kW | 0.001kW |
| Programming Accuracy (Within 12 months、25℃±5℃) ±(%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℃±5℃) ±(%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:≤600mVpp) | ≤120mVpp(MAX:≤600mVpp) | ≤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 |
| AC Input | voltage | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} |
| | 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℃～70℃ | -10℃～70℃ | -10℃～70℃ |
| 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℃ | 0～50℃ | 0～50℃ |
| 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 |

*This information is subject to change without notice.

## Specification

| | | IT6006D-500-40 | IT6012D-500-80 | IT6018D-500-120 |
|---|---|---|---|---|
| Rated Value Range (0℃-50℃) | 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 Offset) | Voltage | ≤0.01%FS | ≤0.01%FS | ≤0.01%FS |
| | Current | ≤0.05%FS | ≤0.05%FS | ≤0.05%FS |
| Load Regulation ±(%of Offset) | Voltage | ≤0.02%FS | ≤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℃±5℃) ±(%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℃±5℃) ±(%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 {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} |
| | 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℃～70℃ | -10℃～70℃ | -10℃～70℃ |
| 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℃ | 0～50℃ | 0～50℃ |
| Dimension(mm) | | 483W*801.61D*151.3H | 483W*801.61D*151.3H | 483W*801.61D*151.3H |
| Net weight | | 20KG | 30KG | 40KG |

*This information is subject to change without notice.

# Your Power Testing Solution

## IT6000D Series High Power Programmable DC Power Supply

### Specification

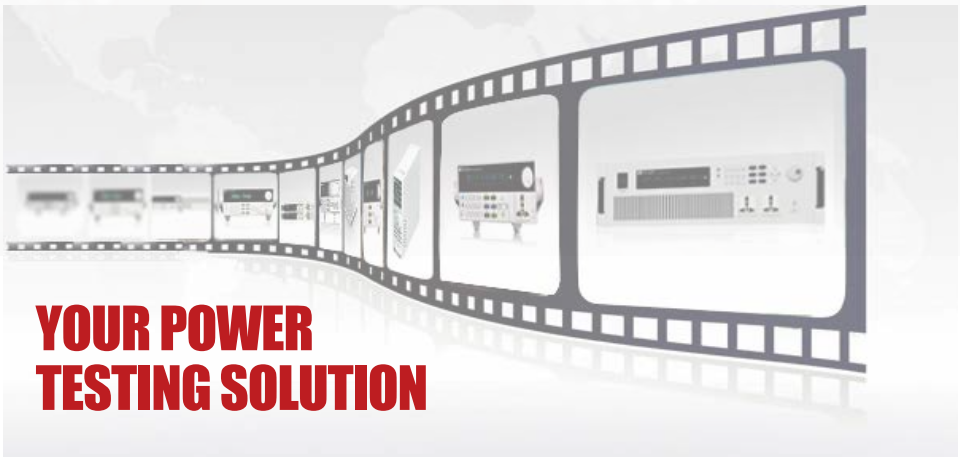
| | | IT6006D-800-25 | IT6012D-800-50 | IT6018D-800-75 |
|---|---|---|---|---|
| Rated Value Range (0℃-50℃) | Output Voltage | 0～800V | 0～800V | 0～800V |
| | Output Current | 0～25A | 0～50A | 0～75A |
| | Output Power | 0～6000W | 0～12000W | 0～18000W |
| Line Regulation ±(%of Offset) | Voltage | ≤0.01%FS | ≤0.01%FS | ≤0.01%FS |
| | Current | ≤0.05%FS | ≤0.05%FS | ≤0.05%FS |
| Load Regulation ±(%of 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 | 0.01A | 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℃±5℃) ±(%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℃±5℃) ±(%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 |
| AC Input | voltage | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} |
| | 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℃～70℃ | -10℃～70℃ | -10℃～70℃ |
| 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℃ | 0～50℃ | 0～50℃ |
| Dimension(mm) | | 483W*801.61D*151.3H | 483W*801.61D*151.3H | 483W*801.61D*151.3H |
| Net Weight | | 20KG | 30KG | 40KG |

*This information is subject to change without notice.

## Specification

| | | IT6018D-1500-40 | IT6018D-2250-25 |
|---|---|---|---|
| Rated Value Range (0 ℃-50 ℃) | Output Voltage | 0～1500V | 0～2250V |
| | Output Current | 0～40A | 0～25A |
| | Output Power | 0～18000W | 0～18000W |
| Line Regulation ±(%of Offset) | Voltage | ≤0.01%FS | ≤0.01%FS |
| | Current | ≤0.05%FS | ≤0.05%FS |
| Load Regulation ±(%of 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℃±5℃) ±(%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℃±5℃) ±(%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 |
| AC Input | voltage | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} | 198V~264V (Decrease 50%) 342V~528V {3PH + PE (no neutral)} |
| | 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℃～70℃ | -10℃～70℃ |
| Protective Function | | OVP/OCP/OPP/OTP/Vsense reverse protection | OVP/OCP/OPP/OTP/Vsense reverse protection |
| Operating Temperature | | 0～50℃ | 0～50℃ |
| Dimension(mm) | | 483W*801.61D*151.3H | 483W*801.61D*151.3H |
| Net Weight | | 40KG | 40KG |

*This information is subject to change without notice.



# YOUR POWER TESTING SOLUTION

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