

## Product

IT6500 Wide Range High-Power  
DC Power Supply



High-power



Wide-range



Fast curve changing  
without overshoot



Maintain excellent performance  
after paralleling



Simple programming  
on the front panel



Full protection



# IT6500 Wide Range High-power DC Power Supplies

## APPLICATIONS

- Automotive Electronics
- Electric Vehicle Battery Test
- Battery Simulation
- Civil avionics
- Solar Panel I-V Curve Simulation
- LED

*Your Power Testing Solution*



# IT6500 **Wide Range High-power** DC Power Supplies

## Overcome the toughest high power test challenges

With ITECH's latest technology, the IT6500 series offers a full-featured high-performance power test solution. With fast response these DC power supplies provide users with a new level of power supply performance. From 800W to 6kW, the maximum output voltage and current is up to 1000V and 240A respectively. With its autoranging capability, it also has a super wide range of voltage and current applications. Users can choose the power supply that fits their testing requirements perfectly.



## Choose the right power supplies that fit your test requirements

IT6502D/IT6512/IT6512A/ IT6513/IT6513A	Good performance and compact size, designed for general purpose testing in R&D and production.
IT6500C/D series	High performance with stable output, designed for automobile, green energy, high speed testing, high-power testing etc.

<b>800W</b>	<b>IT6502D</b> 80V/60A/800W					
<b>1200W</b>	<b>IT6512/A</b> 80V/60A/1200W	<b>IT6513/A</b> 150V/30A/1200W				
<b>1800W</b>	<b>IT6512C/D</b> 80V/120A/1800W	<b>IT6513C/D</b> 200V/60A/1800W	<b>IT6514C/D</b> 360V/30A/1800W	<b>IT6515C/D</b> 500V/20A/1800W	<b>IT6516C/D</b> 750V/15A/1800W	<b>IT6517C/D</b> 1000V/10A/1800W
<b>3kW</b>	<b>IT6522C/D</b> 80V/120A/3kW	<b>IT6523C/D</b> 200V/60A/3kW	<b>IT6524C/D</b> 360V/30A/3kW	<b>IT6525C/D</b> 500V/20A/3kW	<b>IT6526C/D</b> 750V/15A/3kW	<b>IT6527C/D</b> 1000V/10A/3kW
<b>6kW</b>	<b>IT6532C/D</b> 80V/240A/6kW	<b>IT6533C/D</b> 200V/120A/6kW	<b>IT6534C/D</b> 360V/60A/6kW	<b>IT6535C/D</b> 500V/40A/6kW	<b>IT6536C/D</b> 750V/30A/6kW	<b>IT6537C/D</b> 1000V/20A/6kW

\* For higher power test, please contact ITECH.

# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

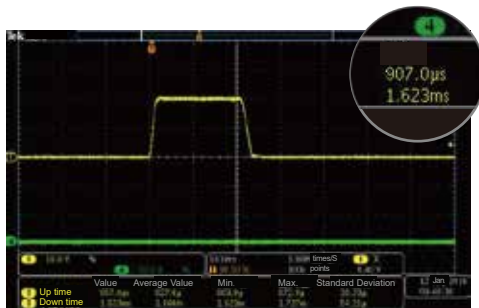
### **FAST** Fast response

#### Independent settable slew rate in different modes

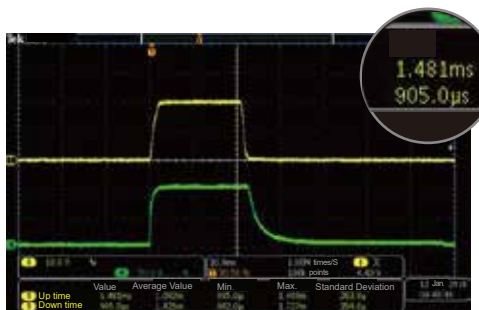
IT6500C series can be used as a power supply and an electronic load. As a power supply, CV, CC, CP modes are available. As an electronic load, CC and CP mode are available. IT6500C supports independent adjustable rise/fall time setting in different modes.

For every single model of IT6500C/D series, no matter it is a single unit or multiple units paralleled together, the rise and fall time of each power supply in IT6500C/D series are the same. Take IT6522C as an example:

- Within 30V voltage range, with 0-90% load, up and down speed <3ms
- Falling time of no load with voltage at full scale:  
Without power dissipater unit, falling time <30ms  
With power dissipater unit, falling time <5ms
- Dynamic response time <3ms



DC ratings of single unit IT6522C: 80V/120A/3000W  
Voltage ratings: 10V  
Current ratings: 120A  
Load Current: 0A



DC ratings of single unit IT6522C: 80V/120A/3000W  
Voltage ratings: 10V  
Current ratings: 120A  
Load Current: 100A

No matter whether it is in the power supply mode (CV, CC, CP) or in the electronic load mode (CC, CP), IT6500 series has adjustable rise and fall time, and the settable range is 1ms-24h.

### **CC/CV PRIORITY** Fast curve changing without overshoot CC & CV Priority Function

To conquer the demanding testing requirements existing for a long time in various applications, ITECH developed an innovative industry-leading CV & CC priority concept. The IT6500 is available for high-speed test applications with-out overshoot. Users can chose the desired output mode. Voltage high-speed mode or current no overshoot mode by choosing the loop response speed and loop operation mode. It is suitable for high-power integrated circuit test, solar array simulation and the transient simulation / characteristic of automotive electronics.



Fast voltage built with turn-on over range inrush current  
(CV-High, CC-Low, CV takes precedence)

### **MAINTAIN EXCELLENT PERFORMANCE AFTER PARALLELING**

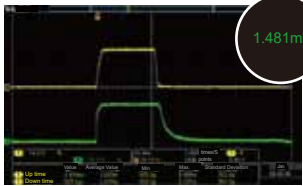
#### Built-in paralleling of multiple power supplies with even current distribution

IT6500C supports multiple power supplies paralleling together in master-slave mode. Even further it can ensure that each power supply equally shares the load current and they all remain in the desired mode. In the traditional sense, when paralleling power supplies together, different power supplies will operate in different operation modes. For instance, when two sets of power supplies are paralleled together, one will offer a majority of current in CC mode, and the other will offer only a small part of current in CV mode, which will degrade certain power supplies' performance specifications. The even current distribution ability of the IT6500 ensures each power supply equally shares the load current without degrading the performance specifications. When paralleling multiple IT6500 the combined system has all the same functions as a standalone unit. That is a great way to add power flexibility to your test system. What is particularly unusual is that after the expansion of power, IT6500C can still maintain the excellent dynamic characteristics of the single unit to meet the I-V characteristic curve testing demanding a variety of high-power high-speed applications.

# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

### Low voltage & high current test



Standalone set IT6522C

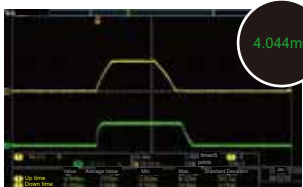
80V, 120A, 3000W  
Voltage ratings: 10V  
Current ratings: 120A  
Load current: 100A



8 sets of IT6522C paralleling together

Voltage ratings: 10V  
Current ratings: 960A  
Load current: 800A

### High voltage & low current test



Standalone set unit IT6522C

80V, 120A, 3000W  
Voltage ratings: 80V  
Current ratings: 120A  
Load current: 30A



8 sets of IT6522C paralleling together

Voltage ratings: 80V  
Current ratings: 960A  
Load current: 300A

### Dynamic response test



Standalone set IT6522C

80V, 120A, 3000W  
Voltage ratings: 10V  
Current ratings: 120A  
Load current:  
Level A=100A  
Level B=100A  
F=10 Hz



8 sets of IT6522C paralleling together

Voltage ratings: 10V  
Current ratings: 960A  
Load current:  
Level A=100A  
Level B=800A  
F=10Hz

\* Figure: Voltage-Yellow, Current-Green

From the tests, we conclude:

1. Voltage rise time: 8 units of IT6522C paralleling together, the voltage rise time is faster than single unit operation.
2. Fall time: parallel units remain the same as single unit.
3. Dynamic response waveforms: parallel units remain the same as single unit.

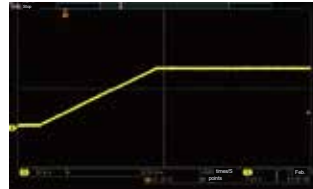


### Simple programming on the front panel (List)

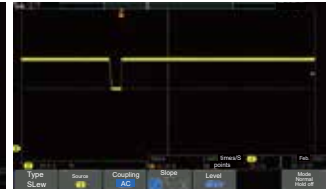
Similar to other modern ITECH products, the IT6500 series provides a user friendly front panel for quick programming without the need for external software.

In list mode, the IT6500 series can store, recall and run the preset customized program sequences via front panel programming. Users can edit the voltage/current value & the time of each step in advance and provide the power supply with a trigger signal. Then the preset sequences / waveform will be executed automatically according to the defined LIST. That's especially suitable for the applications such as DC / DC converters, inverters voltage drop test, engine start-up simulation, battery charging / discharging tests, product life cycle tests and aircraft test etc.

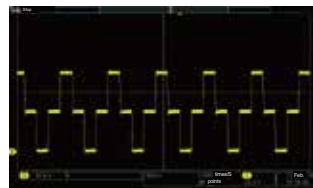
### Waveforms programmed with IT6500 series by engineers



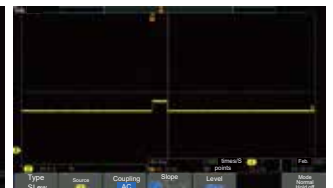
Soft Start Testing



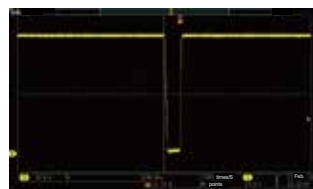
D/D Converter Sag Testing



Voltage Step Waveform



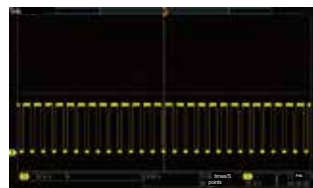
D/D Converter Surge Testing



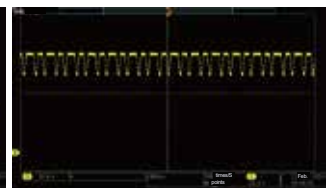
D/D Converter Cycle drop Testing



Life Cycle Testing



Pulse Charge of Battery



Line Regulation Testing

\*Output test with no load



# Your Power Testing Solution

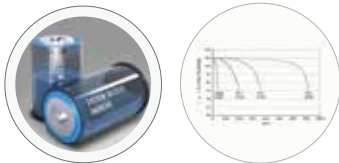
## IT6500 Wide-range High-power DC Power Supply



### Functions for special applications

#### Programmable output impedance

In battery charging and discharging test, the changes of internal resistance should be taken into account. For enhancing test precision, IT6500C series power supply provides built-in internal resistance setting function which can simulate battery operation status in real-case.



Multiple actual working status simulation of batteries

#### Solar panel I-V curve simulation function

IT6500C series high power DC power supply is equipped with SAS1000 solar array simulation software, which can accurately simulate the solar array I-V curve. With built-in EN50530 / Sandia / NB/T32004 / CGC/GF004 / CGC/GF035 SAS module. Users can set the parameters to simulate I-V curve characteristic output and generate reports. These benefit much in test of the static & dynamic maximum power tracking performance of photovoltaic inverters.

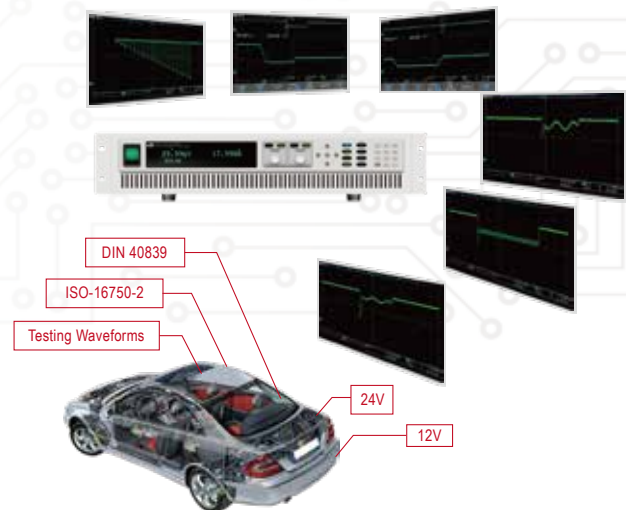
\* SAS1000 solar array simulation software is available for choice



\* Figure: Voltage-Yellow, Current-Green

#### Built-in standard automotive power network voltage curves

The automobile electronics devices must tolerate the dropouts or surges from power turn-on or turn-off transient. For these tests, it is necessary to simulate the worst-case power transient conditions. IT6500C series power supply provide built-in DIN40839, ISO-16750-2, SAEJ1113-11, LV124 and ISO21848 testing curves. Users can select any built-in curve to do the DUT performance test directly according to their demand. 12V, 24V and 48V are available for choice.



### Multiple built-in interfaces\*

In conventional high power test instrument, extra interfaces add cost. In the IT6500 series all the implemented interfaces are built-in standard. Simplifying the configuration process and adding flexibility to change interface used without adding additional cost.

Cost saving	IT6500C	IT6500D	IT6512 IT6513	IT6502D IT6512A IT6513A
Analog control interfaces	√	√	√	√
USB	√	√	√	√
RS232	√	√	√	√
RS485	-	-	√	√
LAN	√	√	-	-
CAN	√	√	-	-

\* For any GPIB interface option request, check with ITECH for availability.



### Full protections

Integrating protection measures into test instruments is critical and high cost especially in high power test. To provide fully protections for DUTs, IT6500 series integrate multiple fast protection measures.

These protection capabilities include:

- CC & CV Priority Function to avoid unwanted overshoot
- Power Supply mode: OVP, OCP, OPP
- Electronic Load mode: OCP, OPP, OTP (IT6500C)
- Anti-reverse protection (optional)
- Turn-off protection
- Under voltage protection (UVP)

# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

Parameter		IT6502D	IT6512	IT6512A	IT6513	IT6513A
Output Rating (0°C~40°C)	Voltage	0~80V	0~80V	0~80V	0~150V	0~150V
	Current	0~60A	0~60A	0~60A	0~30A	0~30A
	Power	0~800W	0~1200W	0~1200W	0~1200W	0~1200W
(Remote sense mode) Load Regulation ±(% of Output+Offset)	Voltage	<0.01%+5mV	<0.01%+8mV	<0.01%+8mV	<0.05%+30mV	<0.05%+30mV
	Current	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+10mA	≤0.1%+30mA	≤0.1%+30mA
Line Regulation ±(% of Output+Offset)	Voltage	<0.02%+1mV	<0.02%+2mV	<0.02%+2mV	<0.02%+20mV	<0.02%+20mV
	Current	<0.02%+1mA	<0.02%+2mA	<0.02%+2mA	<0.02%+10mA	<0.02%+10mA
Setup Resolution	Voltage	1mV	1mV	1mV	3mV	3mV
	Current	1mA	1mA	1mA	1mA	1mA
Readback Resolution	Voltage	1mV	1mV	1mV	3mV	3mV
	Current	1mA	1mA	1mA	1mA	1mA
Setup Accuracy <sup>*1</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.02%+30mV	≤0.02%+30mV	≤0.02%+30mV	≤0.05%+30mV	≤0.05%+30mV
	Current	≤0.1%+0.1%FS	≤0.1%+0.1%FS	≤0.1%+0.1%FS	≤0.2%+0.1%FS	≤0.2%+0.1%FS
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	0.02%+30mV	0.02%+30mV	≤0.02%+30mV	<0.05%+30mV	0.05%+30mV
	Current	≤0.1%+0.1%FS	≤0.1%+0.1%FS	≤0.1%+0.1%FS	≤0.2%+0.1%FS	≤0.2%+0.1%FS
Ripple (20Hz~20MHz)	Voltage	≤30mVp-p	≤30mVp-p	≤30mVp-p	≤60mVp-p	≤60mVp-p
	Current	10mA <sub>Arms</sub>	10mA <sub>Arms</sub>	≤20mA <sub>Arms</sub>	≤40mA <sub>Arms</sub>	40mA <sub>Arms</sub>
Setting Temperature Coefficient ±(% of Output+Offset)	Voltage	0.02%+30mV	0.02%+30mV	≤0.02%+30mV	<0.02%+30mV	0.02%+30mV
	Current	≤0.05%+10mA	≤0.05%+10mA	≤0.05%+10mA	≤0.05%+10mA	≤0.05%+10mA
Readback Temperature Coefficient ±(% of Output+Offset)	Voltage	0.02%+30mV	0.02%+30mV	≤0.02%+30mV	<0.02%+30mV	0.02%+30mV
	Current	≤0.05%+5mA	≤0.05%+5mA	≤0.05%+5mA	≤0.05%+5mA	≤0.05%+5mA
Dimension (mm)		415mmW×44mmH×500mmD				

Parameter		IT6512C	IT6512D	IT6522C	IT6522D	IT6532C	IT6532D
Output Rating (0°C~40°C)	Voltage	0~80V	0~80V	0~80V	0~80V	0~80V	0~80V
	Current	0~120A	0~120A	0~120A	0~120A	0~240A	0~240A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~3.556Ω	-	0~2.133Ω	-	0~1.067Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+30mV				≤0.01%+30mV	
	Current	≤0.05%+30mA				≤0.05%+60mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+10mV				≤0.01%+10mV	
	Current	≤0.01%+15mA				≤0.01%+30mA	
Setup Resolution	Voltage	10mV				100mV	
	Current	10mA				10mA	
Readback Resolution	Voltage	10mV				100mV	
	Current	10mA				10mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25 °C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+30mV				≤0.05%+30mV	
	Current	≤0.2%+120mA				≤0.2%+240mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+30mV				≤0.05%+30mV	
	Current	≤0.2%+120mA				≤0.2%+240mA	
Ripple (20Hz~20MHz)	Voltage	≤80mVp-p				≤80mVp-p	
	Current	≤0.05%+60mA <sub>Arms</sub>				≤0.05%+120mA <sub>Arms</sub>	
Rise time (no load) <sup>*3</sup>	Voltage	≤5ms	≤30ms	≤5ms	≤30ms	≤5ms	≤30ms
Fall time (full load) <sup>*3</sup>	Voltage	≤10ms	≤20ms	≤10ms	≤20ms	≤10ms	≤20ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	

# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

Parameter		IT6513C	IT6513D	IT6523C	IT6523D	IT6533C	IT6533D
Output Rating (0°C~40°C)	Voltage	0~200V	0~200V	0~200V	0~200V	0~200V	0~200V
	Current	0~60A	0~60A	0~60A	0~60A	0~120A	0~120A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~22.222Ω	-	0~13Ω	-	0~6.666Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+50mV				≤0.01%+50mV	
	Current	≤0.05%+20mA				≤0.05%+40mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+20mV				≤0.01%+20mV	
	Current	≤0.01%+10mA				≤0.01%+20mA	
Setup Resolution	Voltage	10mV				10mV	
	Current	10mA				10mA	
Readback Resolution	Voltage	10mV				10mV	
	Current	10mA				10mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+100mV				≤0.05%+100mV	
	Current	≤0.2%+60mA				≤0.2%+120mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+100mV				≤0.05%+100mV	
	Current	≤0.2%+60mA				≤0.2%+120mA	
Ripple (20Hz~20MHz)	Voltage	≤200mVp-p				≤200mVp-p	
	Current	≤50mA <sub>rms</sub>				≤100mA <sub>rms</sub>	
Rise time (no load) <sup>*3</sup>	Voltage	≤15ms	≤100ms	≤15ms	≤100ms	≤15ms	≤100ms
Fall time (full load) <sup>*3</sup>	Voltage	≤15ms	≤20ms	≤15ms	≤20ms	≤15ms	≤20ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	

Parameter		IT6514C	IT6514D	IT6524C	IT6524D	IT6534C	IT6534D
Output Rating (0°C~40°C)	Voltage	0~360V	0~360V	0~360V	0~360V	0~360V	0~360V
	Current	0~30A	0~30A	0~30A	0~30A	0~60A	0~60A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~72Ω	-	0~43.2Ω	-	0~21.6Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+135mV				≤0.01%+135mV	
	Current	≤0.05%+15mA				≤0.05%+30mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+40mV				≤0.01%+40mV	
	Current	≤0.01%+5mA				≤0.01%+10mA	
Setup Resolution	Voltage	10mV				10mV	
	Current	10mA				10mA	
Readback Resolution	Voltage	10mV				10mV	
	Current	10mA				10mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+135mV				≤0.05%+135mV	
	Current	≤0.2%+30mA				≤0.2%+60mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+135mV				≤0.05%+135mV	
	Current	≤0.2%+30mA				≤0.2%+60mA	
Ripple (20Hz~20MHz)	Voltage	≤360mVp-p				≤360mVp-p	
	Current	≤0.05%+30mA <sub>rms</sub>				≤0.05%+60mA <sub>rms</sub>	
Rise time (no load) <sup>*3</sup>	Voltage	≤50ms	≤250ms	≤50ms	≤250ms	≤50ms	≤250ms
Fall time (full load) <sup>*3</sup>	Voltage	≤55ms	≤70ms	≤55ms	≤70ms	≤55ms	≤70ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	

<sup>\*1</sup> Setup Accuracy refers to users use panel keys or communication commands to achieve setup accuracy; when using external analog programming, the programming accuracy is 1%  
<sup>\*2</sup> Readback Accuracy refers to users use panel display or communication commands to achieve readback accuracy; when using external analog monitoring, the monitor accuracy is 1%  
<sup>\*3</sup> Rise and Fall Time refers to the settling time of setup value from one value to another using the internal standard power dissipator in the ON state

# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

Parameter		IT6515C	IT6515D	IT6525C	IT6525D	IT6535C	IT6535D
Output Rating (0°C~40°C)	Voltage	0~500V	0~500V	0~500V	0~500V	0~500V	0~500V
	Current	0~20A	0~20A	0~20A	0~20A	0~40A	0~40A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~138.88Ω	-	0~83.33Ω	-	0~41.66Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+100mV				≤0.01%+100mV	
	Current	≤0.05%+20mA				≤0.05%+40mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+50mV				≤0.01%+50mV	
	Current	≤0.01%+5mA				≤0.01%+10mA	
Setup Resolution	Voltage	100mV				100mV	
	Current	10mA				10mA	
Readback Resolution	Voltage	100mV				100mV	
	Current	10mA				10mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+200mV				≤0.05%+200mV	
	Current	≤0.2%+20mA				≤0.2%+40mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+200mV				≤0.05%+200mV	
	Current	≤0.2%+20mA				≤0.2%+40mA	
Ripple (20Hz~20MHz)	Voltage	≤500mVp-p				≤500mVp-p	
	Current	≤40mArms				≤80mArms	
Rise time (no load) <sup>*3</sup>	Voltage	≤40ms	≤200ms	≤40ms	≤200ms	≤40ms	≤200ms
Fall time (full load) <sup>*3</sup>	Voltage	≤25ms	≤30ms	≤25ms	≤30ms	≤25ms	≤30ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	

Parameter		IT6516C	IT6516D	IT6526C	IT6526D	IT6536C	IT6536D
Output Rating (0°C~40°C)	Voltage	0~750V	0~750V	0~750V	0~750V	0~750V	0~750V
	Current	0~15A	0~15A	0~15A	0~15A	0~30A	0~30A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~312.5Ω	-	0~188Ω	-	0~93.75Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+200mV				≤0.01%+200mV	
	Current	≤0.05%+15mA				≤0.05%+30mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+75mV				≤0.01%+75mV	
	Current	≤0.1%+5mA				≤0.1%+10mA	
Setup Resolution	Voltage	100mV				100mV	
	Current	10mA				10mA	
Readback Resolution	Voltage	100mV				100mV	
	Current	10mA				10mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25 °C±5 °C) ±(% of Output+Offset)	Voltage	≤0.05%+300mV				≤0.05%+300mV	
	Current	≤0.2%+15mA				≤0.2%+30mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+300mV				≤0.05%+300mV	
	Current	≤0.2%+15mA				≤0.2%+30mA	
Ripple (20Hz~20MHz)	Voltage	≤750mVp-p				≤750mVp-p	
	Current	≤30mArms				≤60mArms	
Rise time (no load) <sup>*3</sup>	Voltage	≤50ms	≤250ms	≤50ms	≤250ms	≤50ms	≤250ms
Fall time (full load) <sup>*3</sup>	Voltage	≤20ms	≤20ms	≤20ms	≤20ms	≤20ms	≤20ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	



# Your Power Testing Solution

## IT6500 Wide-range High-power DC Power Supply

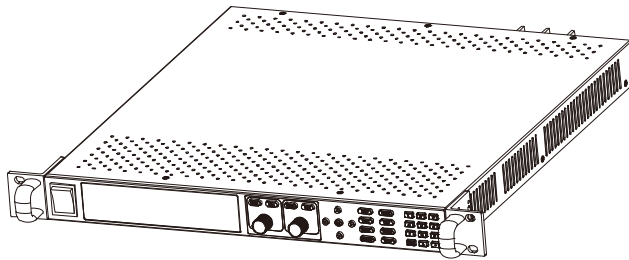
Parameter		IT6517C	IT6517D	IT6527C	IT6527D	IT6537C	IT6537D
Output Rating (0°C~40°C)	Voltage	0~1000V	0~1000V	0~1000V	0~1000V	0~1000V	0~1000V
	Current	0~10A	0~10A	0~10A	0~10A	0~20A	0~20A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6kW	0~6kW
Programmable output resistance		0~555.555Ω	-	0~333.333Ω	-	0~166.666Ω	-
Load Regulation ±(% of Output+Offset)	Voltage	≤0.01%+375mV				≤0.01%+375mV	
	Current	≤0.05%+5mA				≤0.05%+10mA	
Line Regulation ±(% of Output+Offset)	Voltage	≤0.01%+100mV				≤0.01%+100mV	
	Current	≤0.01%+5mA				≤0.01%+10mA	
Setup Resolution	Voltage	100mV				100mV	
	Current	1mA				1mA	
Readback Resolution	Voltage	100mV				100mV	
	Current	1mA				1mA	
Setup Accuracy <sup>*1</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+375mV				≤0.05%+375mV	
	Current	≤0.2%+10mA				≤0.2%+20mA	
Readback Accuracy <sup>*2</sup> (Within 12 months, 25°C±5°C) ±(% of Output+Offset)	Voltage	≤0.05%+375mV				≤0.05%+375mV	
	Current	≤0.2%+10mA				≤0.2%+20mA	
Ripple (20Hz~20MHz)	Voltage	≤1Vp-p				≤1Vp-p	
	Current	≤0.05%+10mA <sub>Arms</sub>				≤0.05%+20mA <sub>Arms</sub>	
Rise time (no load) <sup>*3</sup>	Voltage	≤70ms	≤300ms	≤70ms	≤300ms	≤70ms	≤300ms
Fall time (full load) <sup>*3</sup>	Voltage	≤30ms	≤30ms	≤30ms	≤30ms	≤30ms	≤30ms
Number of Power Dissipators in Parallel		≤3	-	≤3	-	≤6	-
Dimension (mm)		483mmW×105.4mmH×640.8mmD				483mmW×194mmH×640.8mmD	

<sup>\*1</sup> Setup Accuracy refers to users use panel keys or communication commands to achieve setup accuracy; when using external analog programming, the programming accuracy is 1%

<sup>\*2</sup> Readback Accuracy refers to users use panel display or communication commands to achieve readback accuracy; when using external analog monitoring, the monitor accuracy is 1%

<sup>\*3</sup> Rise and Fall Time refers to the settling time of setup value from one value to another using the internal standard power dissipator in the ON state

### IT6512 / IT6513 / IT6512A / IT6513A / IT6502D Model



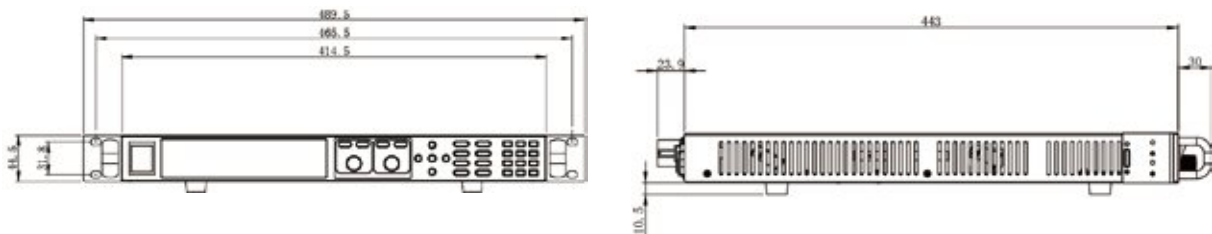
#### Machine size

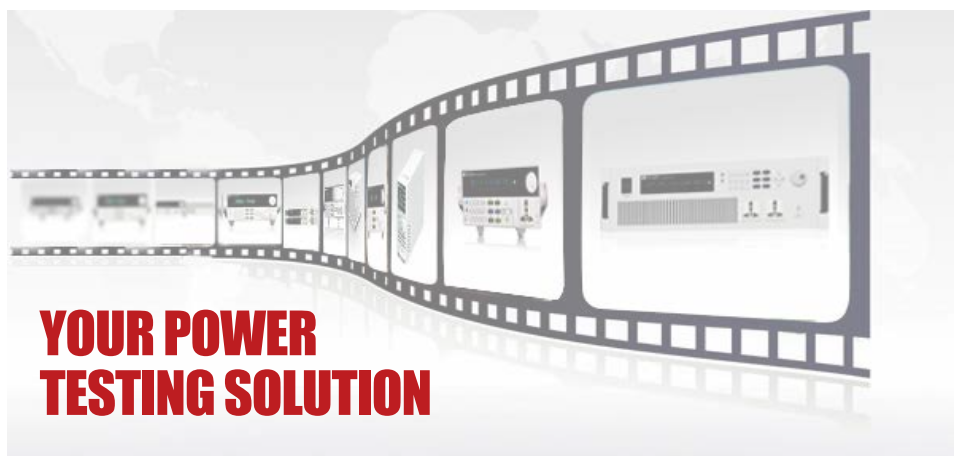
Width: 414.5mm

Height: 44.5mm

Depth: 500mm

#### Detailed Dimension





This information is subject to change without notice. For more information, please contact ITECH.

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