

## Product

IT8000 Regenerative DC Electronic Load

# Energy Regeneration



## IT8000 Regenerative DC Electronic Load

### APPLICATIONS

- Batteries
- Large capacity DC power supply test
- Aging test
- Natural energy
- Power electronic equipments detection

*Your Power Testing Solution*

# IT8000

## REGENERATIVE DC ELECTRONIC LOAD



IT8000 series is a family of high power regenerative electronic loads with compact size. The highly integrated capability enables the e-load to simulate various e-load characteristics, and return the consumed energy back to the grid cleanly, saving costs related to energy consumption and cooling, meanwhile eco-friendly. With modular high power density design, IT8000 provide up to 18kW in 3U space. The power is expandable up to 1152kW by master-slave paralleling and active current sharing. If you move into application of high power UPS, storage battery, PV battery, EV, energy storage system, ITECH can help you with IT8000 series high power regenerative electronic load.

|     | Model          | Current | Power |      | Model           | Current | Power |      | Model          | Current | Power |
|-----|----------------|---------|-------|------|-----------------|---------|-------|------|----------------|---------|-------|
| 80V | IT8005-80-150  | 150A    | 5kW   | 300V | IT8006-300-75   | 75A     | 6kW   | 500V | IT8006-500-40  | 40A     | 6kW   |
|     | IT8010-80-300  | 300A    | 10kW  |      | IT8012-300-150  | 150A    | 12kW  |      | IT8012-500-80  | 80A     | 12kW  |
|     | IT8015-80-450  | 450A    | 15kW  |      | IT8018-300-225  | 225A    | 18kW  |      | IT8018-500-120 | 120A    | 18kW  |
|     | IT8030-80-900  | 900A    | 30kW  |      | IT8036-300-450  | 450A    | 36kW  |      | IT8036-500-240 | 240A    | 36kW  |
|     | IT8045-80-1350 | 1350A   | 45kW  |      | IT8054-300-675  | 675A    | 54kW  |      | IT8054-500-360 | 360A    | 54kW  |
|     | IT8060-80-1800 | 1800A   | 60kW  |      | IT8072-300-900  | 900A    | 72kW  |      | IT8072-500-480 | 480A    | 72kW  |
|     | IT8075-80-2040 | 2040A   | 75kW  |      | IT8090-300-1125 | 1125A   | 90kW  |      | IT8090-500-600 | 600A    | 90kW  |
|     | IT8090-80-2040 | 2040A   | 90kW  |      | IT8108-300-1350 | 1350A   | 108kW |      | IT8108-500-720 | 720A    | 108kW |
|     | IT8105-80-2040 | 2040A   | 105kW |      | IT8126-300-1575 | 1575A   | 126kW |      | IT8126-500-840 | 840A    | 126kW |
|     | IT8120-80-2040 | 2040A   | 120kW |      | IT8144-300-1800 | 1800A   | 144kW |      | IT8144-500-960 | 960A    | 144kW |

|      | Model          | Current | Power |       | Model           | Current | Power |       | Model           | Current | Power |
|------|----------------|---------|-------|-------|-----------------|---------|-------|-------|-----------------|---------|-------|
| 800V | IT8006-800-25  | 25A     | 6kW   | 1500V | IT8018-1500-40  | 40A     | 18kW  | 2250V | IT8018-2250-25  | 25A     | 18kW  |
|      | IT8012-800-50  | 50A     | 12kW  |       | IT8036-1500-80  | 80A     | 36kW  |       | IT8036-2250-50  | 50A     | 36kW  |
|      | IT8018-800-75  | 75A     | 18kW  |       | IT8054-1500-120 | 120A    | 54kW  |       | IT8054-2250-75  | 75A     | 54kW  |
|      | IT8036-800-150 | 150A    | 36kW  |       | IT8072-1500-160 | 160A    | 72kW  |       | IT8072-2250-100 | 100A    | 72kW  |
|      | IT8054-800-225 | 225A    | 54kW  |       | IT8090-1500-200 | 200A    | 90kW  |       | IT8090-2250-125 | 125A    | 90kW  |
|      | IT8072-800-300 | 300A    | 72kW  |       | IT8108-1500-240 | 240A    | 108kW |       | IT8108-2250-150 | 150A    | 108kW |
|      | IT8090-800-375 | 375A    | 90kW  |       | IT8126-1500-280 | 280A    | 126kW |       | IT8126-2250-175 | 175A    | 126kW |
|      | IT8108-800-450 | 450A    | 108kW |       | IT8144-1500-320 | 320A    | 144kW |       | IT8144-2250-200 | 200A    | 144kW |
|      | IT8126-800-525 | 525A    | 126kW |       |                 |         |       |       |                 |         |       |
|      | IT8144-800-600 | 600A    | 144kW |       |                 |         |       |       |                 |         |       |

\* This information is subject to change without notice

# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Features

- Recover DC energy to local grid with efficiency up to 95%
- Stand-alone power up to 144kW, expandable by master-slave paralleling up to 1152kW
- Stand-alone input voltage up to 2250V
- Stand-alone input current up to 2040A
- High power density design provides 18kW in 3U space
- Built-in waveform generator, support generating arbitrary waveforms
- LIST function, support importing LIST files by USB
- Power accumulation function
- Battery test function, auto-test function, short circuit test function
- With pre-charging function, prevent DC loading current overshoot
- Full protection: OVP/OCV/OPP/OTP/UVP, Vsense anti-reverse connection protection, and voltage transient drop protection
- Built-in standard USB/CAN/LAN/digital IO interface, and optional GPIB/Analog&RS232 interfaces
- Support SCPI protocol, LabVIEW
- Operating mode: CC/CV/CP/CR/CC+CV/CV+CR/CR+CC/CC+CV+CP+CR

\*The regenerated power is for local grid purpose, not for public grid purpose.

### Applications

#### Multiple types of batteries Charge-Discharge Testing

Lead storage battery, Lithium battery, Power battery pack, Energy storage battery

#### Natural energy virtual load test

Solar arrays, Wind turbine

#### Safety testing of mechanical systems with large capacity batteries

Unmanned vans, Nursing electric chairs, etc.

#### Aging test (automotive high voltage motor, fuse, relay) and small motors testing

Aging life testing for AC/DC, DC/DC converters

Tests for large capacity DC power supply such as ground electrical power

Evaluation test for fuel cells and stacks

Detection and aging test for power electronic equipments



# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

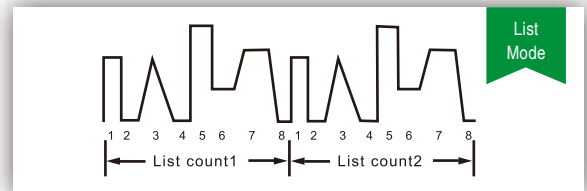
### Power accumulation function

IT8000 series regenerative DC electronic load uses the power electronic transformation technology on the premise of completing test power experiment to make output energy of measured power supply regenerative recycled and reused. Through the inside fast sampling of voltage and current, the regenerative power value can be observed on the front panel of IT8000 series, including voltage, frequency and power of each phase, as well as total power, total current regenerative and total historical regenerative power, which makes the energy saving effect much easier. Re-open after power failure, IT8000 series will continue to accumulate the regenerative power value based on the last power off value.



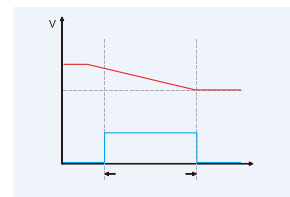
### List function

IT8000 series regenerative DC electronic load provides list mode, it can complete the complex arbitrary current change mode accurately and fast, and can synchronize with internal or external signals to complete multi-level loading precision test, which greatly save cost for customers. By editing the step value, pulse width and the slope of each step, IT8000 can generate a variety of complex sequences and help users to complete various loading waveforms test. In the CC mode, IT8000 series can set rising and falling speed.

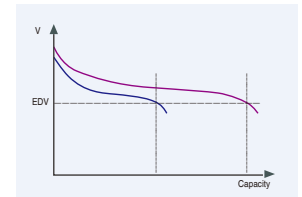


### Battery test function

IT8000 series regenerative DC electronic load simulate battery discharge test under CC mode, and support settable discharge cut-off conditions, such as cut-off voltage, cut-off capacity and cut-off time. When any of the three conditions are met, the discharge test will be stopped. Moreover, the battery voltage, discharge time and the discharged capacity can be observed during the test, which reflects the reliability of the battery and its remaining life.



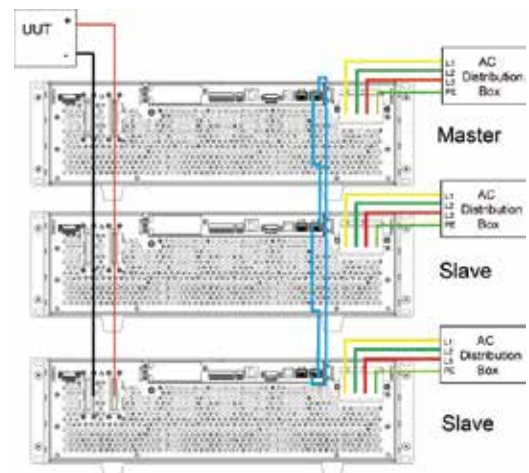
Discharge test



Capacity test

### Patented parallel technology

- IT8000 has adopted ITECH 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



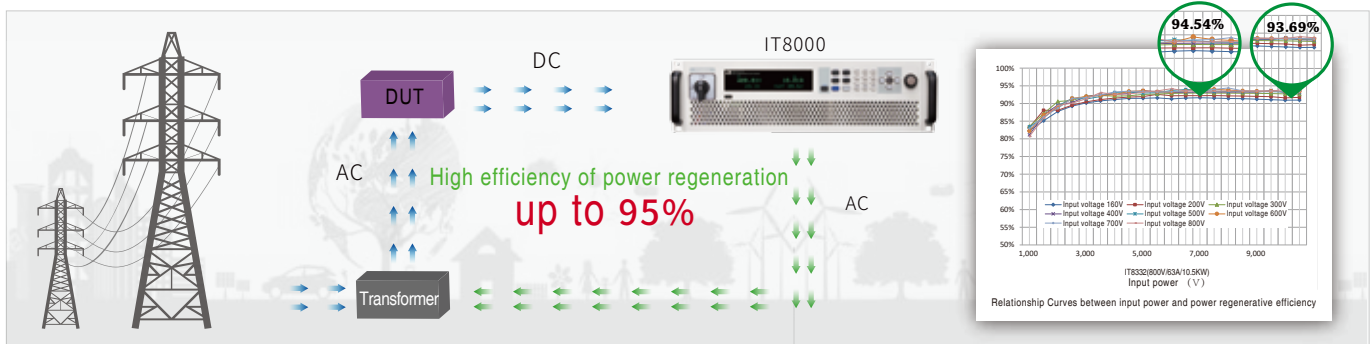


# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Power regenerative efficiency up to 95%

High energy regenerative efficiency. The IT8000 series has a unique energy regenerative function that can regenerate electrical energy and then directly use it in the plant instead of consuming it in the form of heat. Its conversion efficiency can up to 95%, which not only will greatly reduce the user's electricity cost, but also avoid the use of air conditioning or expensive cooling systems.



### High power density

Conventional electronic loads are not only with high energy consumption, but also with very large size and weight. Energy consumption electronic load with 30kW load is at least 24U, it is difficult to transport and the cost is higher. IT8000 series regenerative DC electronic load adopts high power density design of 18kW in only 3U high. Compared to conventional electronic loads, the size for IT8000 series is decreased by 80% under the same output power.



### Full protection

IT8000 series regenerative DC electronic load supports automatic detection the grid state . When grid connection is suddenly disconnected or power down, IT8000 will be turned off. IT8000 series can achieve reliable on-grid function and anti-islanding protection function. IT8000 supports monitoring on DC input voltage and frequency, and supports OCP, OVP, OTP, OPP function .



# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8005-80-150                                                                                    | IT8010-80-300         | IT8015-80-450         |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0~80V                                                                                            | 0~80V                 | 0~80V                 |
|                                                                         | Current               | 0~150A                                                                                           | 0~300A                | 0~450A                |
|                                                                         | Power                 | 0~5000W                                                                                          | 0~10000W              | 0~15000W              |
|                                                                         | Resistance            | 0.001~1067Ω                                                                                      | 0.01~333Ω             | 0.001~356Ω            |
|                                                                         | Min.Operation Voltage | 0.45V at 150A                                                                                    | 0.45V at 300A         | 0.45V at 450A         |
| Input Resolution                                                        | Voltage               | 0.001V                                                                                           | 0.001V                | 0.001V                |
|                                                                         | Current               | 0.001A                                                                                           | 0.01A                 | 0.01A                 |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW               | 0.001kW               |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.001Ω                | 0.0001Ω               |
|                                                                         |                       |                                                                                                  |                       |                       |
| Readback Resolution                                                     | Voltage               | 0.001V                                                                                           | 0.001V                | 0.001V                |
|                                                                         | Current               | 0.01A                                                                                            | 0.01A                 | 0.01A                 |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW               | 0.001kW               |
|                                                                         | Resistance            | 0.001Ω                                                                                           | 0.001Ω                | 0.0001Ω               |
|                                                                         |                       |                                                                                                  |                       |                       |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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       |
|                                                                         | Resistance            | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax                                                              | ≤ 1% + 1%FS           | ≤ 1% + 1%FS           |
|                                                                         |                       |                                                                                                  |                       |                       |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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       |
|                                                                         | Resistance            | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax                                                              | ≤ 1% + 1%FS           | ≤ 1% + 1%FS           |
|                                                                         |                       |                                                                                                  |                       |                       |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤ 50PPM/°C                                                                                       | ≤ 50PPM/ °C           | ≤ 50PPM/ °C           |
|                                                                         | Current               | ≤ 200PPM/°C                                                                                      | ≤ 200PPM/ °C          | ≤ 200PPM/ °C          |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤ 50PPM/°C                                                                                       | ≤ 50PPM/ °C           | ≤ 50PPM/ °C           |
|                                                                         | Current               | ≤ 200PPM/°C                                                                                      | ≤ 200PPM/ °C          | ≤ 200PPM/ °C          |
| Dynamic Response Time                                                   | Rise Speed Rate       | 150A/ms                                                                                          | 300A/ms               | 450A/ms               |
|                                                                         | Fall Speed Rate       | 150A/ms                                                                                          | 300A/ms               | 450A/ms               |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                 | 500Hz                 |
|                                                                         | Minimum Rise Time     | ≤ 1ms                                                                                            | ≤ 1ms                 | ≤ 1ms                 |
|                                                                         |                       |                                                                                                  |                       |                       |
| Output Rating                                                           | Output Voltage        | 198V~264V (Decrease 50%) 342V~528V (3P4W)                                                        |                       |                       |
|                                                                         | Output Frequency      | 47Hz~63Hz                                                                                        | 47Hz~63Hz             | 47Hz~63Hz             |
|                                                                         | Max. Output Current   | L1,L2/17A;L3/0A                                                                                  | L1,L2/17A;L3/29A      | L1,L2/17A;L3/29A      |
|                                                                         | Power Factor          | ≥ 0.99                                                                                           | ≥ 0.99                | ≥ 0.99                |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding | Active anti-islanding |
|                                                                         |                       |                                                                                                  |                       |                       |
| Set up Stability-30min<br>(%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       |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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       |
| Input Impedance Static Current                                          |                       | <10mA at Vmax                                                                                    | <10mA at Vmax         | <10mA at Vmax         |
| Efficiency                                                              |                       | ~ 90%                                                                                            | ~ 90%                 | ~ 90%                 |
| Remote Sense Compensation Voltage                                       |                       | ≤ 2V                                                                                             | ≤ 2V                  | ≤ 2V                  |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2ms                   | 2ms                   |
| Storage Tem.                                                            |                       | -10 °C ~ 70 °C                                                                                   | -10 °C ~ 70 °C        | -10 °C ~ 70 °C        |
| Protection Function                                                     |                       | OVP、OCP、OPP、OTP、Vsense Reverse protection                                                        |                       |                       |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                       |                       |
| Withstand Voltage (input to ground)                                     |                       | 500V                                                                                             | 500V                  | 500V                  |
| Working Tem.                                                            |                       | 0~50 °C                                                                                          | 0~50 °C               | 0~50 °C               |
| Net. 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

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8006-300-75                                                                                    | IT8012-300-150        | IT8018-300-225        |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0 ~ 300V                                                                                         | 0 ~ 300V              | 0 ~ 300V              |
|                                                                         | Current               | 0 ~ 75A                                                                                          | 0 ~ 150A              | 0 ~ 225A              |
|                                                                         | Power                 | 0 ~ 6000W                                                                                        | 0 ~ 12000W            | 0 ~ 18000W            |
|                                                                         | Resistance            | 0.001 ~ 7500Ω                                                                                    | 0.001 ~ 4000Ω         | 0.001 ~ 2667Ω         |
|                                                                         | Min.Operation Voltage | 1.6V at 75A                                                                                      | 1.6V at 150A          | 1.6V at 225A          |
| Input Resolution                                                        | Voltage               | 0.01V                                                                                            | 0.01V                 | 0.01V                 |
|                                                                         | Current               | 0.001A                                                                                           | 0.01A                 | 0.01A                 |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW               | 0.001kW               |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.001Ω                | 0.001Ω                |
| Readback Resolution                                                     | Voltage               | 0.01V                                                                                            | 0.01V                 | 0.01V                 |
|                                                                         | Current               | 0.001A                                                                                           | 0.01A                 | 0.01A                 |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW               | 0.001kW               |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.001Ω                | 0.001Ω                |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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       |
|                                                                         | Resistance            | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax                                                      |                       | ≤ 0.02% + 0.02%FS     |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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       |
|                                                                         | Resistance            | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax                                                      |                       | ≤ 0.02% + 0.02%FS     |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C           | ≤ 50PPM/ °C           |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C          | ≤ 200PPM/ °C          |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C           | ≤ 50PPM/ °C           |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C          | ≤ 200PPM/ °C          |
| Dynamic Response Time                                                   | Rise Speed Rate       | 75A/ms                                                                                           | 150A/ms               | 225A/ms               |
|                                                                         | Fall Speed Rate       | 75A/ms                                                                                           | 150A/ms               | 225A/ms               |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                 | 500Hz                 |
|                                                                         | Minimum Rise Time     | ≤ 1ms                                                                                            | ≤ 1ms                 | ≤ 1ms                 |
| Output Rating                                                           | Output Voltage        | 198V ~ 264V ( Decrease 50% ) 342V ~ 528V ( 3P4W )                                                |                       |                       |
|                                                                         | Output Frequency      | 47Hz ~ 63Hz                                                                                      | 47Hz ~ 63Hz           | 47Hz ~ 63Hz           |
|                                                                         | Max. Output Current   | L1,L2/20A;L3/0A                                                                                  | L1,L2/20A;L3/34A      | 28A                   |
|                                                                         | Power Factor          | ≥ 0.99                                                                                           | ≥ 0.99                | ≥ 0.99                |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding | Active anti-islanding |
|                                                                         |                       |                                                                                                  |                       |                       |
| Set up Stability-30min<br>(%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       |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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       |
| Input Impedance Static Current                                          |                       | <4mA at Vmax                                                                                     | <7mA at Vmax          | <10mA at Vmax         |
| Efficiency                                                              |                       | ~ 92%                                                                                            | ~ 92%                 | ~ 92%                 |
| Remote Sense Compensation Voltage                                       |                       | ≤ 3V                                                                                             | ≤ 3V                  | ≤ 3V                  |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2Ms                   | 2Ms                   |
| Storage Tem.                                                            |                       | -10 °C ~ 70 °C                                                                                   | -10 °C ~ 70 °C        | -10 °C ~ 70 °C        |
| Protection Function                                                     |                       | OVP、 OCP、 OPP、 OTP、 Vsense Reverse protection                                                    |                       |                       |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                       |                       |
| Withstand Voltage (input to ground)                                     |                       | 1000V                                                                                            | 1000V                 | 1000V                 |
| Working Tem.                                                            |                       | 0 ~ 50 °C                                                                                        | 0 ~ 50 °C             | 0 ~ 50 °C             |
| Net. 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

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8006-500-40                                                                                    | IT8012-500-80                                  |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0 ~ 500V                                                                                         | 0 ~ 500V                                       |
|                                                                         | Current               | 0 ~ 40A                                                                                          | 0 ~ 80A                                        |
|                                                                         | Power                 | 0 ~ 6000W                                                                                        | 0 ~ 12000W                                     |
|                                                                         | Resistance            | 0.001 ~ 7500Ω                                                                                    | 0.001 ~ 7500Ω                                  |
|                                                                         | Min.Operation Voltage | 2.4V at 40A                                                                                      | 2.4V at 80A                                    |
| Input Resolution                                                        | Voltage               | 0.01V                                                                                            | 0.01V                                          |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                         |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                        |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.01Ω                                          |
| Readback Resolution                                                     | Voltage               | 0.01V                                                                                            | 0.01V                                          |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                         |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                        |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.01Ω                                          |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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                                |
|                                                                         | Resistance            | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax                                                        | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax      |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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                                |
|                                                                         | Resistance            | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax                                                        | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax      |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                    |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                   |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                    |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                   |
| Dynamic Response Time                                                   | Rise Speed Rate       | 40A/ms                                                                                           | 80A/ms                                         |
|                                                                         | Fall Speed Rate       | 40A/ms                                                                                           | 80A/ms                                         |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                                          |
|                                                                         | Minimum Rise Time     | ≤ 1ms                                                                                            | ≤ 1ms                                          |
| Output Rating                                                           | Output Voltage        | 198V ~ 264V ( Decrease 50%) 342V ~ 528V (3P4W)                                                   | 198V ~ 264V ( Decrease 50%) 342V ~ 528V (3P4W) |
|                                                                         | Output Frequency      | 47Hz ~ 63Hz                                                                                      | 47Hz ~ 63Hz                                    |
|                                                                         | Max. Output Current   | L1,L2/20A;L3/0A                                                                                  | L1,L2/20A;L3/34A                               |
|                                                                         | Power Factor          | ≥ 0.99                                                                                           | ≥ 0.99                                         |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding                          |
| Set up Stability-30min<br>(%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                                |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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                                |
| Input Impedance Static Current                                          |                       | <10mA at Vmax                                                                                    | <10mA at Vmax                                  |
| Efficiency                                                              |                       | ~ 92%                                                                                            | ~ 92%                                          |
| Remote Sense Compensation Voltage                                       |                       | ≤ 5V                                                                                             | ≤ 5V                                           |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2Ms                                            |
| Storage Tem.                                                            |                       | -10 °C ~ 70 °C                                                                                   | -10 °C ~ 70 °C                                 |
| Protection Function                                                     |                       | OVP、 OCP、 OPP、 OTP、 Vsense Reverse protection                                                    |                                                |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                                                |
| Withstand Voltage (input to ground)                                     |                       | 1000V                                                                                            | 1000V                                          |
| Working Tem.                                                            |                       | 0 ~ 50 °C                                                                                        | 0 ~ 50 °C                                      |
| Net. Dimension (mm)                                                     |                       | 483W*801.61D*151.3H                                                                              | 483W*801.61D*151.3H                            |
| Net. Weight                                                             |                       | 20KG                                                                                             | 30KG                                           |

\*This information is subject to change without notice.



# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8018-500-120                                                                                   | IT8006-800-25                             |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0~500V                                                                                           | 0~800V                                    |
|                                                                         | Current               | 0~120A                                                                                           | 0~25A                                     |
|                                                                         | Power                 | 0~18000W                                                                                         | 0~6000W                                   |
|                                                                         | Resistance            | 0.001~7500Ω                                                                                      | 0.001~7500Ω                               |
|                                                                         | Min.Operation Voltage | 2.4V at 120A                                                                                     | 2.1V at 25A                               |
| Input Resolution                                                        | Voltage               | 0.01V                                                                                            | 0.01V                                     |
|                                                                         | Current               | 0.01A                                                                                            | 0.001A                                    |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                   |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.1Ω                                      |
| Readback Resolution                                                     | Voltage               | 0.01V                                                                                            | 0.01V                                     |
|                                                                         | Current               | 0.01A                                                                                            | 0.001A                                    |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                   |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.1Ω                                      |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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                            |
|                                                                         | Resistance            | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax                                                              | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax       |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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                            |
|                                                                         | Resistance            | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax                                                              | ≤2%Rmax,0~10%Rmax; ≤5%Rmax,10%~Rmax       |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤50PPM/ °C                                                                                       | ≤50PPM/ °C                                |
|                                                                         | Current               | ≤200PPM/ °C                                                                                      | ≤200PPM/ °C                               |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤50PPM/ °C                                                                                       | ≤50PPM/ °C                                |
|                                                                         | Current               | ≤200PPM/ °C                                                                                      | ≤200PPM/ °C                               |
| Dynamic Response Time                                                   | Rise Speed Rate       | 120A/ms                                                                                          | 25A/ms                                    |
|                                                                         | Fall Speed Rate       | 120A/ms                                                                                          | 25A/ms                                    |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                                     |
|                                                                         | Minimum Rise Time     | ≤1ms                                                                                             | ≤1ms                                      |
| Output Rating                                                           | Output Voltage        | 198V~264V (Decrease 50%) 342V~528V (3P4W)                                                        | 198V~264V (Decrease 50%) 342V~528V (3P4W) |
|                                                                         | Output Frequency      | 47Hz~63Hz                                                                                        | 47Hz~63Hz                                 |
|                                                                         | Max. Output Current   | 28A                                                                                              | L1,L2/20A;L3/0A                           |
|                                                                         | Power Factor          | ≥0.99                                                                                            | ≥0.99                                     |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding                     |
| Set up Stability-30min<br>(%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                            |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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                            |
| Input Impedance Static Current                                          |                       | <10mA at Vmax                                                                                    | <10mA at Vmax                             |
| Efficiency                                                              |                       | ~92%                                                                                             | ~92%                                      |
| Remote Sense Compensation Voltage                                       |                       | ≤5V                                                                                              | ≤8V                                       |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2Ms                                       |
| Storage Tem.                                                            |                       | -10 °C ~70 °C                                                                                    | -10 °C ~70 °C                             |
| Protection Function                                                     |                       | OVP、OCP、OPP、OTP、Vsense Reverse protection                                                        |                                           |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                                           |
| Withstand Voltage (input to ground)                                     |                       | 1000V                                                                                            | 1500V                                     |
| Working Tem.                                                            |                       | 0~50 °C                                                                                          | 0~50 °C                                   |
| Net. Dimension (mm)                                                     |                       | 483W*801.61D*151.3H                                                                              | 483W*801.61D*151.3H                       |
| Net. Weight                                                             |                       | 40KG                                                                                             | 20KG                                      |

\*This information is subject to change without notice.

# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8012-800-50                                                                                    | IT8018-800-75                                  |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0 ~ 800V                                                                                         | 0 ~ 800V                                       |
|                                                                         | Current               | 0 ~ 50A                                                                                          | 0 ~ 75A                                        |
|                                                                         | Power                 | 0 ~ 12000W                                                                                       | 0 ~ 18000W                                     |
|                                                                         | Resistance            | 0.001 ~ 7500Ω                                                                                    | 0.001 ~ 7500Ω                                  |
|                                                                         | Min.Operation Voltage | 2.1V at 50A                                                                                      | 2.1V at 75A                                    |
| Input Resolution                                                        | Voltage               | 0.01V                                                                                            | 0.01V                                          |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                         |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                        |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.01Ω                                          |
| Readback Resolution                                                     | Voltage               | 0.01V                                                                                            | 0.01V                                          |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                         |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                        |
|                                                                         | Resistance            | 0.01Ω                                                                                            | 0.01Ω                                          |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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                                |
|                                                                         | Resistance            | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax                                                        | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax      |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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                                |
|                                                                         | Resistance            | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax                                                        | ≤ 2%Rmax,0 ~ 10%Rmax; ≤ 5%Rmax,10% ~ Rmax      |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                    |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                   |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                    |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                   |
| Dynamic Response Time                                                   | Rise Speed Rate       | 50A/ms                                                                                           | 75A/ms                                         |
|                                                                         | Fall Speed Rate       | 50A/ms                                                                                           | 75A/ms                                         |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                                          |
|                                                                         | Minimum Rise Time     | ≤ 1ms                                                                                            | ≤ 1ms                                          |
| Output Rating                                                           | Output Voltage        | 198V ~ 264V ( Decrease 50%) 342V ~ 528V (3P4W)                                                   | 198V ~ 264V ( Decrease 50%) 342V ~ 528V (3P4W) |
|                                                                         | Output Frequency      | 47Hz ~ 63Hz                                                                                      | 47Hz ~ 63Hz                                    |
|                                                                         | Max. Output Current   | L1,L2/20A;L3/34A                                                                                 | 28A                                            |
|                                                                         | Power Factor          | ≥ 0.99                                                                                           | ≥ 0.99                                         |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding                          |
| Set up Stability-30min<br>(%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                                |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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                                |
| Input Impedance Static Current                                          |                       | <10mA at Vmax                                                                                    | <10mA at Vmax                                  |
| Efficiency                                                              |                       | ~ 92%                                                                                            | ~ 92%                                          |
| Remote Sense Compensation Voltage                                       |                       | ≤ 8V                                                                                             | ≤ 8V                                           |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2Ms                                            |
| Storage Tem.                                                            |                       | -10 °C ~ 70 °C                                                                                   | -10 °C ~ 70 °C                                 |
| Protection Function                                                     |                       | OVP、 OCP、 OPP、 OTP、 Vsense Reverse protection                                                    |                                                |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                                                |
| Withstand Voltage (input to ground)                                     |                       | 1500V                                                                                            | 1500V                                          |
| Working Tem.                                                            |                       | 0 ~ 50 °C                                                                                        | 0 ~ 50 °C                                      |
| Net. Dimension (mm)                                                     |                       | 483W*801.61D*151.3H                                                                              | 483W*801.61D*151.3H                            |
| Net. Weight                                                             |                       | 30KG                                                                                             | 40KG                                           |

\*This information is subject to change without notice.

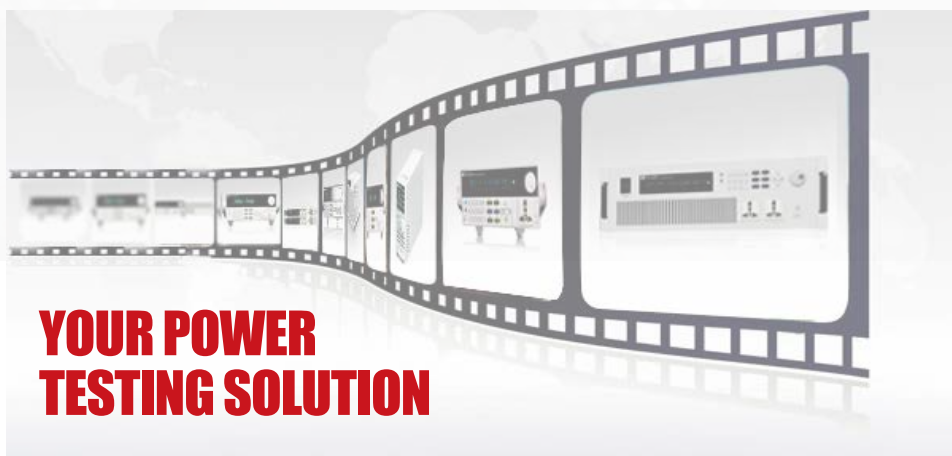
# Your Power Testing Solution

## IT8000 Regenerative DC Electronic Load

### Specification

|                                                                         |                       | IT8018-1500-40                                                                                   | IT8018-2250-25                                  |
|-------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Rated Input Value<br>( 0 °C-40 °C)                                      | Voltage               | 0 ~ 1500V                                                                                        | 0 ~ 2250V                                       |
|                                                                         | Current               | 0 ~ 40A                                                                                          | 0 ~ 25A                                         |
|                                                                         | Power                 | 0 ~ 18000W                                                                                       | 0 ~ 18000W                                      |
|                                                                         | Resistance            | 0.001 ~ 7500Ω                                                                                    | 0.001 ~ 7500Ω                                   |
|                                                                         | Min.Operation Voltage | 7.2V at 40A                                                                                      | 6.25V at 25A                                    |
| Input Resolution                                                        | Voltage               | 0.1V                                                                                             | 0.1V                                            |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                          |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                         |
|                                                                         | Resistance            | 0.1Ω                                                                                             | 0.1Ω                                            |
| Readback Resolution                                                     | Voltage               | 0.1V                                                                                             | 0.1V                                            |
|                                                                         | Current               | 0.001A                                                                                           | 0.001A                                          |
|                                                                         | Power                 | 0.001kW                                                                                          | 0.001kW                                         |
|                                                                         | Resistance            | 0.1Ω                                                                                             | 0.1Ω                                            |
| Set up Accuracy<br>within 12 mons 25°±5°<br>±( %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                                 |
|                                                                         | Resistance            | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax                                                      | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax     |
| Readback Accuracy<br>within 12 mons 25°±5°<br>±( %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                                 |
|                                                                         | Resistance            | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax                                                      | ≤ 2%Rmax, 0 ~ 10%Rmax; ≤ 5%Rmax, 10% ~ Rmax     |
| Input Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset)    | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                     |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                    |
| Readback Drift Temperature<br>co-efficiency<br>(%of Output/ °C +Offset) | Voltage               | ≤ 50PPM/ °C                                                                                      | ≤ 50PPM/ °C                                     |
|                                                                         | Current               | ≤ 200PPM/ °C                                                                                     | ≤ 200PPM/ °C                                    |
| Dynamic Response Time                                                   | Rise Speed Rate       | 40A/ms                                                                                           | 25A/ms                                          |
|                                                                         | Fall Speed Rate       | 40A/ms                                                                                           | 25A/ms                                          |
|                                                                         | Dynamic Frequency     | 500Hz                                                                                            | 500Hz                                           |
|                                                                         | Minimum Rise Time     | ≤ 1ms                                                                                            | ≤ 1ms                                           |
| Output Rating                                                           | Output Voltage        | 198V ~ 264V ( Decrease 50%) 342V ~ 528V ( 3P4W)                                                  | 198V ~ 264V ( Decrease 50%) 342V ~ 528V ( 3P4W) |
|                                                                         | Output Frequency      | 47Hz ~ 63Hz                                                                                      | 47Hz ~ 63Hz                                     |
|                                                                         | Max. Output Current   | 28A                                                                                              | 28A                                             |
|                                                                         | Power Factor          | ≥ 0.99                                                                                           | ≥ 0.99                                          |
|                                                                         | Active Anti-islanding | Active anti-islanding                                                                            | Active anti-islanding                           |
| Set up Stability-30min<br>(%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                                 |
| Set up Stability-8h<br>(%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<br>(%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<br>(%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                                 |
| Input Impedance Static Current                                          |                       | <10mA at Vmax                                                                                    | <10mA at Vmax                                   |
| Efficiency                                                              |                       | ~ 92%                                                                                            | ~ 92%                                           |
| Remote Sense Compensation Voltage                                       |                       | ≤ 15V                                                                                            | ≤ 22.5V                                         |
| Command Response Time                                                   |                       | 2Ms                                                                                              | 2Ms                                             |
| Storage Tem.                                                            |                       | -10 °C ~ 70 °C                                                                                   | -10 °C ~ 70 °C                                  |
| Protection Function                                                     |                       | OVP、 OCP、 OPP、 OTP、 Vsense Reverse protection                                                    |                                                 |
| Interfaces                                                              |                       | Built-in standard USB/CAN/LAN/VCP, optional GPIB, analog (including RS232), optical fiber socket |                                                 |
| Withstand Voltage (input to ground)                                     |                       | 1800V                                                                                            | 3000V                                           |
| Working Tem.                                                            |                       | 0 ~ 50 °C                                                                                        | 0 ~ 50 °C                                       |
| Net. Dimension (mm)                                                     |                       | 483W*801.61D*151.3H                                                                              | 483W*801.61D*151.3H                             |
| Net. Weight                                                             |                       | 40KG                                                                                             | 40KG                                            |

\*This information is subject to change without notice.



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

## Taipei

Add: No.918, Zhongzheng Rd., Zhonghe Dist., New Taipei City  
235, Taiwan

Web: [www.itechate.com.tw](http://www.itechate.com.tw)

TEL: +886-3-6684333

E-mail: [taiwan@itechate.com.tw](mailto:taiwan@itechate.com.tw)

## Xishan Factory

Add: No.108, XiShanqiao Nanlu, Nanjing city, 210039, China

TEL: +86-25-52415098

Web: [www.itechate.com](http://www.itechate.com)

## Meishan Factory

Add: No.150, Yaonanlu, Meishan Cun, Nanjing city, 210039, China

TEL: +86-25-52415099

Web: [www.itechate.com](http://www.itechate.com)



ITECH Web



ITECH Facebook