ITECH

YOUR POWER TESTING SOLUTION

IT7800

High Power Programmable AC Power Supply (HV)

Your Power Testing Solution

IT7800
high power programmable AC power supply

High Voltage Series

Voltage up to 700VL-N, even reach 1050VL-N

The IT7800 series is a new generation of high power programmable AC power supply featuring user-friendly programming options, a novel touch interface, and rich waveform analysis capabilities. The high-voltage series is available at voltages as high as 700 VL-N and even fulfills 1050 VL-N test standards. By paralleling them, the high voltage series may be easily enlarged to 900 kVA.

The IT7800 series is equipped with an LCD touch screen design with an intuitive and easy-to-use UI interface allowing users to quickly and smoothly use the operation. Built-in all-round power meter and arbitrary waveform generator, which can simulate harmonics and various arbitrary waveform outputs; programmable output impedance and a full range of measurement functions make the IT7800 series widely used in new energy, power electronics, scientific research institutions and other fields of research and development, production, quality control and other stages.

FEATURE

- Voltages up to 700 VL-N, even 1050 VL-N
- Harmonic simulation and analysis functions up to 50th *1
- Output frequency: 16-2400 Hz, voltage and frequency output variation rate adjustable
- Built-in AC power meter
- AC/AC+DC output mode possible
- Three-phase output
- Harmonic and interharmonic waveform synthesis *2
- Programmable output impedance
- Touch screen design, simple UI interface
- Arbitrary waveform output can be simulated, and CSV file import waveform is supported.
- Built-in rich waveform database
- List mode analog utility reproduction function, realizing the instantaneous power interruption simulation function
- Output start/stop phase angle can be set from 0 to 360°.
- Surge & Sag function*2
- Relay Ctrl relay control output function for electrical isolation between the object to be measured and the source.
- Built-in USB/CAN/LAN/digital IO interface, optional GPIB/RS232 interface.
- Built-in IEC61000-4-11/4-13/4-14/4-28 test waveforms*2

*1 Voltage/current harmonic analysis, voltage harmonic simulation

*2 Coming soon

Applications

New Energy
OBC, AC/DC charging pile

Power electronics
frequency converter, UPS, AC motor

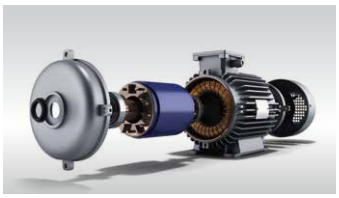
Appliance
air conditioner, microwave oven, refrigerator, washing machine

Civil aviation
airborne equipment, airport ground facilities

Research institute, lab, testing organizations
AC-DC power adapter, EMC test

Medical equipments
CT, MRI, life detector etc



Civil aviation

New energy
Home appliances




Research institutes


Model	Voltage range Vac		Current range Aac	Power	Phase	Height
	V L-N	V L-L	Arms(3Φ)	Pac		
IT7890-700-90	700V	1200V	90A	90kVA	3Φ	27U
IT78180-700-180	700V	1200V	180A	180kVA	3Φ	27U*2
IT78270-700-270	700V	1200V	270A	270kVA	3Φ	27U*3
IT78360-700-360	700V	1200V	360A	360kVA	3Φ	27U*4
IT78450-700-450	700V	1200V	450A	450kVA	3Φ	27U*5
IT78540-700-540	700V	1200V	540A	540kVA	3Φ	27U*6
IT78630-700-630	700V	1200V	630A	630kVA	3Φ	27U*7
IT78720-700-720	700V	1200V	720A	720kVA	3Φ	27U*8
IT78810-700-810	700V	1200V	810A	810kVA	3Φ	27U*9
IT78900-700-900	700V	1200V	900A	900kVA	3Φ	27U*10
IT78135-1050-90	1050V	1818V	90A	135kVA	3Φ	37U
IT78270-1050-180	1050V	1818V	180A	270kVA	3Φ	37U*2
IT78405-1050-270	1050V	1818V	270A	405kVA	3Φ	37U*3
IT78540-1050-360	1050V	1818V	360A	540kVA	3Φ	37U*4
IT78675-1050-450	1050V	1818V	450A	675kVA	3Φ	37U*5
IT78810-1050-540	1050V	1818V	540A	810kVA	3Φ	37U*6

* For higher power products, please contact ITECH
* The above specifications are subject to change without prior notice.

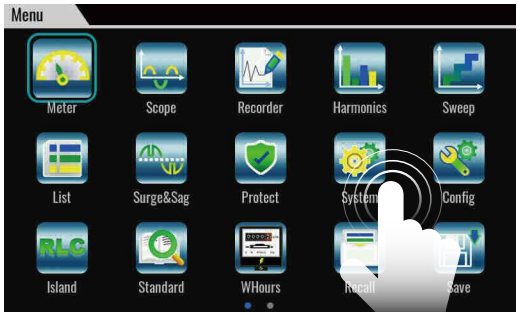
Your Power Testing Solution

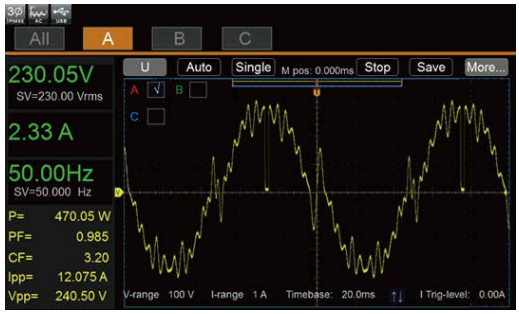
IT7800 High Power Programmable AC Power Supply (HV)

Easy-to-operate touch design

The IT7800 series is equipped with a new touch screen design with a simple and intuitive UI interface.
Combined with the keyboard knob design allows users to make direct and quick selections.
Users can choose different interface display styles, customize the type of parameters and display position of the page.
The user can choose different interface display styles, customize the type of parameters and display position of the page, and humanized settings can meet a variety of measurement needs in the test.

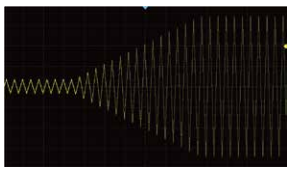
The screen can display real-time voltage and current curves, up to 6 oscilloscope data lines, users can instantly analyze without an oscilloscope and save in time.

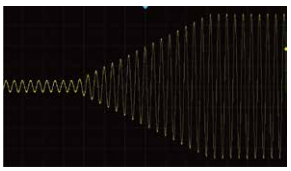




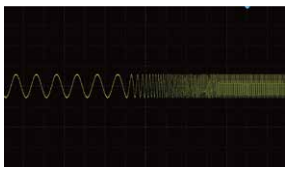
Output frequency up to 2.4kHZ, voltage or frequency output rate of change adjustable

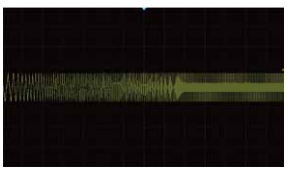
The IT7800 series output frequency is adjustable from 16-2400Hz, which allows the user to set the rate of change of voltage or frequency output, so that the voltage or frequency can reach the set value in a regular and gradual manner, which can be used to verify the operating range of the product more accurately, and also reduce the inrush current when the object to be tested is switched on.





voltage adjustable

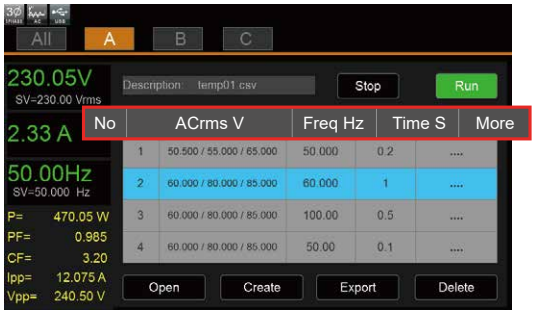




frequency adjustable

List Mode

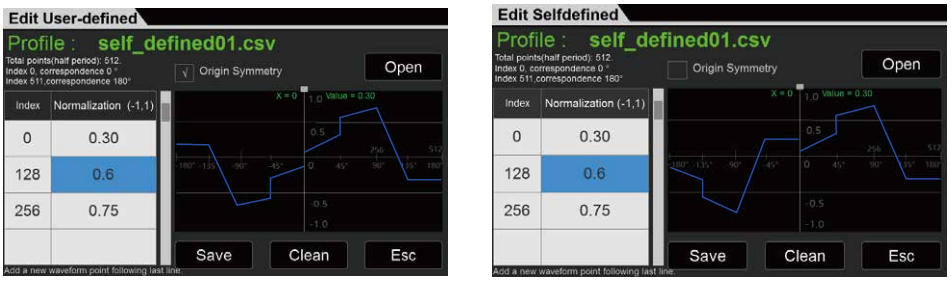
The IT7800 series provides users with a simple and easy way to realize gradual or continuous changes in output parameters through the LIST/SWEEP/SURGE&SAG modes. The amplitude, frequency, phase, waveform and other parameters of the output voltage can also be output through the control of internal triggers or external triggers within the instrument, so that it can simulate the characteristics of various kinds of power supply with instantaneous power outage, sudden wave, and slow rise.



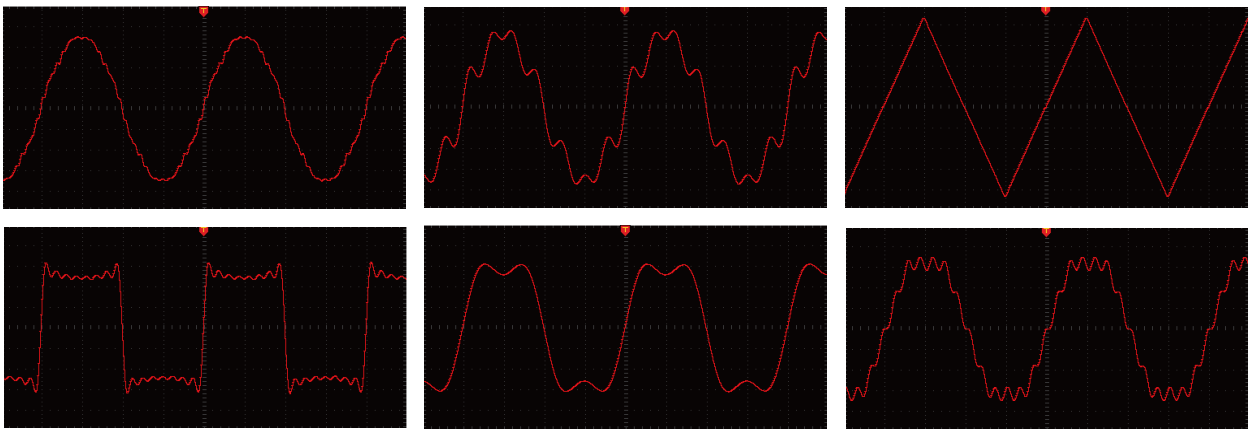
Built-in Waveform Database

The IT7800 series has built-in many different types of waveforms, such as triangle, sine, square, and sawtooth waveforms, which can be recalled through the menu and displayed on the LCD screen.

Users can also edit waveforms through the interface's customization mode to mimic and reproduce the real power waveforms at the scene of the problem.



The IT7800 series has 30 built-in harmonic distortion waveforms.



Your Power Testing Solution

IT7800 High Power Programmable AC Power Supply (HV)

		IT7890-700-90	
Input parameter			
AC input	Wiring connection	3 phase 3wire + ground(PE)	
	Line voltage	RMS	(200～220V) ±10% *1 (380～480V) ±10%
	Line current	RMS	< 200A
	Apparent power		< 104kVA
	Frequency range		45～65Hz
	PF	typ	0.98
Output parameter			
AC output	Output voltage	VLN*2	0～700V
		VLL	0～1212V
	Output current	RMS (3phase)	90A
		Peak(3phase)	270A
	Output power	Max. Power （3phase）	90kVA
	Voltage setting		
	Range	0～700V(3phase)	
	Resolution	0.01V	
	Accuracy	＜0.1%+0.2% F.S.	
	Current setting		
	Range	RMS	90A
	Resolution	0.01A	
	Accuracy	＜0.2% + 0.3% F.S.	
	Frequency		
	Set range	16～100Hz	
	Set resolution	0.01Hz	
	Set accuracy	0.01%	
	harmonic waveform	50/60Hz	up to 50 orders
	Phase		
	Set range	0～360°	
	Set resolution	0.01°	
Voltage stability	**Voltage setting**		
	Line regulation	＜0.05% F.S.	
	Load regulation *2	＜0.1% + 0.1% F.S.	
	THD	＜1%	
	Voltage ripple	RMS	< 1.2V
	Dynamic response	typ	200μs
Votage slew rate		≥2 V/μs with full-scale programmed voltage step	
Output isolation		750Vac	
Measurement parameter			
Voltage RMS	Resolution	0.01V	
	Accuracy	＜0.1%+0.2% F.S.	
Current RMS	Resolution	0.01A	
	Accuracy	＜0.2% + 0.3% F.S.	
Output power	Resolution	0.001kW	
	Accuracy	＜0.4% +0.6% F.S.	
Harmonic measurement	Max.	50/60Hz	up to 50 orders
Other			
Efficiency		88% （typ）	
Protection		OVP, OCP, OPP, OTP, FAN, ECP, Sense	
Working environment		0°C-50°C	
Program response time		2ms	
Snese		20V	

*1 (200～220) ±10%, 60% of rated power output.

*2 Cabinets need to be tested in sense remote measurement mode.

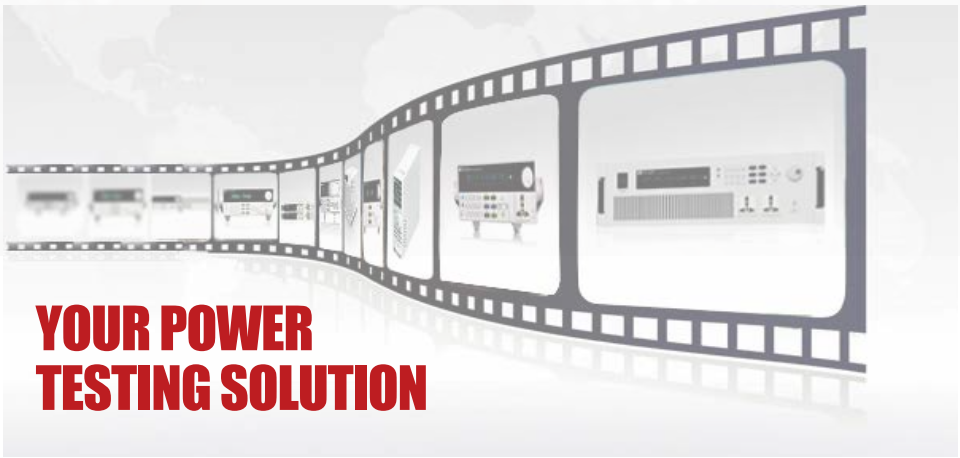
* The above specifications are subject to change without notice.

		IT78135-1050-90	
Input parameter			
AC input	Wiring connection	3 phase 3wire + ground(PE)	
	Line voltage	RMS	(200～220V) ±10% *1 (380～480V) ±10%
	Line current	RMS	< 299A
	Apparent power		< 157kVA
	Frequency range		45～65Hz
	PF	typ	0.98
Output parameter			
AC output	Output voltage	VLN*2	0～1050V
		VLL	0～1818V
	Output current	RMS (3phase)	90A
		Peak(3phase)	270A
	Output power	Max. Power （3phase）	135kVA
	Voltage setting		
	Range	0～1050V(3phase)	
	Resolution	0.1V	
	Accuracy	＜0.1%+0.2% F.S.	
	Current setting		
	Range	RMS	90A
	Resolution	0.01A	
	Accuracy	＜0.2% + 0.3% F.S.	
	Frequency		
	Set range	16～100Hz	
	Set resolution	0.01Hz	
	Set accuracy	0.01%	
	harmonic waveform	50/60Hz	up to 50 orders
	Phase		
	Set range	0～360°	
	Set resolution	0.01°	
Voltage stability	**Voltage setting**		
	Line regulation	＜0.05% F.S.	
	Load regulation *2	＜0.1% + 0.1% F.S.	
	THD	＜1%	
	Voltage ripple	RMS	< 1.8V
	Dynamic response	typ	200μs
Votage slew rate		≥2 V/μs with full-scale programmed voltage step	
Output isolation		1100Vac	
Measurement parameter			
Voltage RMS	Resolution	0.1V	
	Accuracy	＜0.1%+0.2% F.S.	
Current RMS	Resolution	0.01A	
	Accuracy	＜0.2% + 0.3% F.S.	
Output power	Resolution	0.1kW	
	Accuracy	＜0.4% +0.6% F.S.	
Harmonic measurement	Max.	50/60Hz	up to 50 orders
Other			
Efficiency		88% （typ）	
Protection		OVP, OCP, OPP, OTP, FAN, ECP, Sense	
Working environment		0°C-50°C	
Program response time		2ms	
Snese		20V	

*1 (200～220) ±10%, 60% of rated power output.

*2 Cabinets need to be tested in sense remote measurement mode.

* The above specifications are subject to change without notice.



YOUR POWER TESTING SOLUTION

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
TEL: +886-3-6684333
E-mail: info@itechate.com

Factory I

Add: No.108, XiShanqiao Nanlu, Nanjing city, 210039, China
TEL: +86-25-52415098
Web: www.itechate.com

Factory II

Add: No.150, Yaonanlu, Meishan Cun, Nanjing city, 210039, China
TEL: +86-25-52415099
Web: www.itechate.com

ITECH Web

ITECH Facebook

ITECH LinkedIn