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TECHNICAL PRODUCT INFORMATION

Test & measurement instruments

- high - quality
- moderate prices
- excellent precision

Your contact:

Technical support, services, demo & rental equipment, price information
& quotes, consulting:

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Shop: www.lxinstruments.com/shop

Your Power Testing Solution

IT7800 High Power Programmable AC Power Supply (HV)

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 Arms(3Φ)	Power	Phase	Height
	V L-N	V L-L		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.



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.

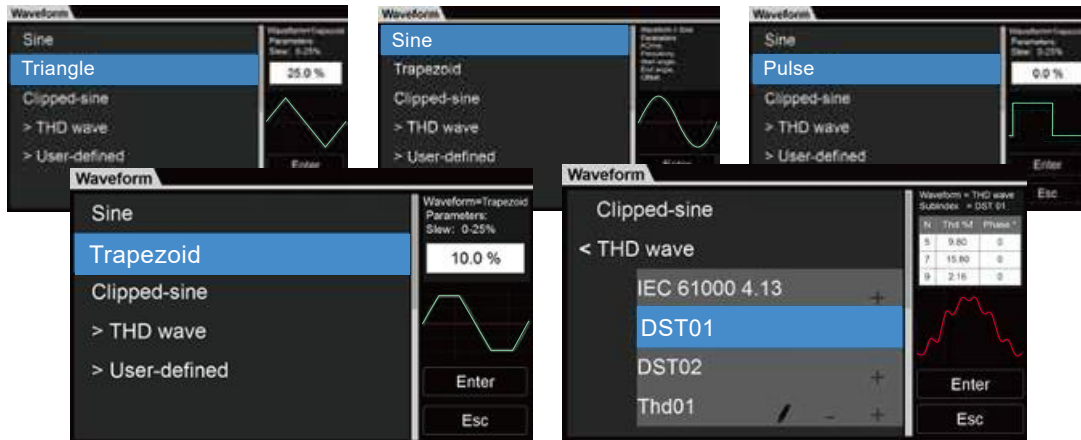
No	ACrms V	Freq Hz	Time S	More
1	50.500 / 55.000 / 65.000	50.000	0.2	----
2	60.000 / 80.000 / 85.000	60.000	1	----
3	60.000 / 80.000 / 85.000	100.00	0.5	----
4	60.000 / 80.000 / 85.000	50.00	0.1	----

Your Power Testing Solution

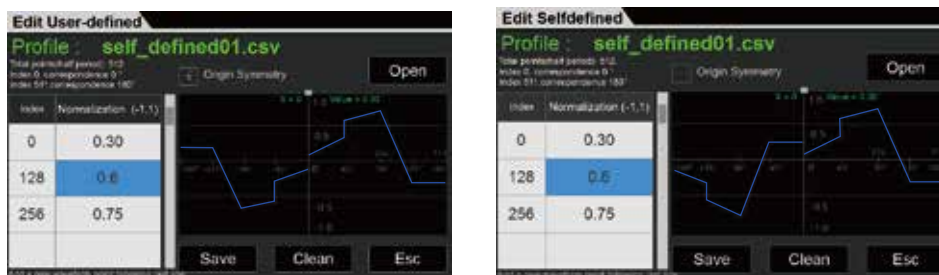
IT7800 High Power Programmable AC Power Supply (HV)

Built-in Waveform Database

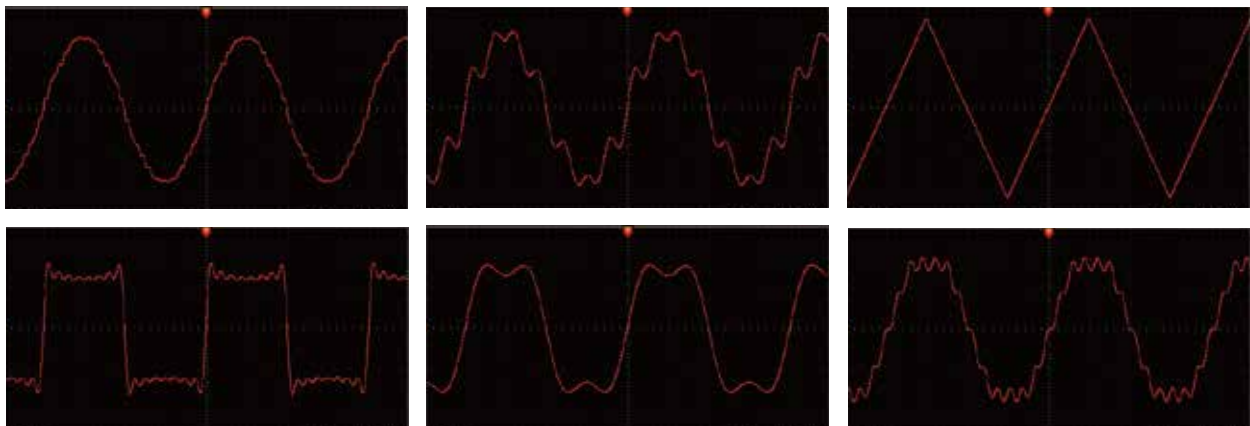
The IT7800 series has built-in many different types of waveforms, such as triangle, sine, square, and sawtooth waveforms, which can be recalled through the menu and displayed on the LCD screen.



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*3	<1%	
	Voltage ripple	RMS	< 1.2V
Dynamic response		typ	200μs
Votage slew rate		≥2 V/μs with full-scale programmed voltage step	
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	typ*4	91%	
Protection		OVP, OCP, OPP, OTP, FAN, ECP, Sense	
Working environment		0°C-40°C	
Program response time		2ms	
Snese		20V	
Maximum Working Isolation Voltage		±1000Vdc	
Withstand Voltage	Input to Ground	3000Vdc/1min	
	Input to Output	2250Vdc/1min	
	Output to Ground	2100Vdc/1min	

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

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

*3 Test condition: purely resistive load, at full power.

*4 Test condition: input 380VLL/50Hz, output three-phase 1050Vrms/50Hz at full power.

* The above specifications are subject to change without notice.

05 IT7800 High Power Programmable AC Power Supply (HV)

Your Power Testing Solution

IT7800 High Power Programmable AC Power Supply (HV)

		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*3	<1%	
	Voltage ripple	RMS	< 1.8V
	Dynamic response	typ	200μs
Votage slew rate		≥2 V/μs with full-scale programmed voltage step	
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	typ*4	91%	
Protection		OVP, OCP, OPP, OTP, FAN, ECP, Sense	
Working environment		0°C-40°C	
Program response time		2ms	
Snese		20V	
Maximum Working Isolation Voltage		±1500Vdc	
Withstand Voltage	Input to Ground	3000Vdc/1min	
	Input to Output	2250Vdc/1min	
	Output to Ground	2250Vdc/1min	

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*3 Test condition: purely resistive load, at full power.

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

*4 Test condition: input 380VLL/50Hz, output three-phase 1050Vrms/50Hz at full power.