IT7321

IT7300 Series AC power supply

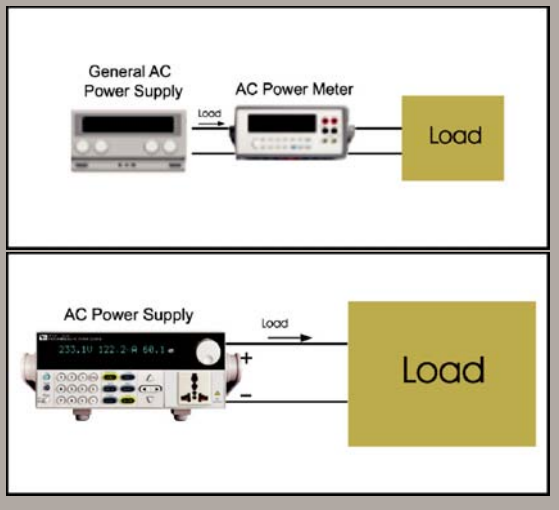
IT7300 series sets up the new standard for high performance AC power source. It equips with all powerful features such as power line disturbance (PLD) simulation, Dimmer and comprehensive measurement functions. IT7300 series has built-in LAN/ RS232/USB/GPIB communication interface. IT7300 series can apply to commercial, power electronics and military test applications from bench-top testing to mass production.

Feature

- High accuracy and resolution
- Compact and standard size (300VA ½2U)
- Programmable frequency:45HZ-500HZ
- Display Vrms,Irms,Ipeak,frequency,PF,apparent power and active power simultaneously
- IEC61000-4-11,IEC 61000-4-14,IEC 61000-4-28 voltage dips and frequency variation simulation
- Power line disturbance simulation capability
- Programmable voltage and current limit settings
- Dimmer function
- Turn on,turn off phase angle control(0-360°)
- TTL signal which indicates output transient
- Support front and rear panel output
- List mode to generate surge,sag and other line disturbance simulations
- Over-voltage,over-power,over-current,over-temperature protection features
- Built-in LAN,RS-232/GPIB/USB interface programming with SCPI command language Note:IT7321 do not have GPIB interface

Model	Specification
IT7321	300V/3A/300VA
IT7322	300V/6A/750VA
IT7324	300V/12A/1500VA
IT7326	300V/24A/3000VA

IT7300 = “AC power supply”
+ “Power meter”



Normally, when test AC products, a power meter is needed to connect between AC power supply and DUT in series. Since power meter is built-in in IT7300, user don't need to connect an extra power meter. It is not only easy for test, but also save cost.

Linear Amplifier Technology

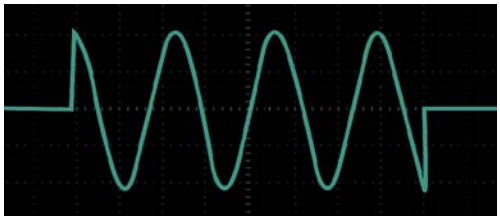
IT7300 series AC source adopts latest linear technology which greatly reduce the output noise and ensure high working stability. Because of the lower ripple index, this series AC source can assist user to get a more precision measuring result.

Multi-function and high precision measurement

IT7300 series AC source uses advanced DSP circuit to get higher precision and high-speed measurement for ture RMS voltage, true RMS current, true power, frequency, power factor and peak value. In addition, its high resolution 0.01W/0.1mA extends the application for Energy Star testing standard. IT7300 series is not only a AC source, but also a powerful meter.

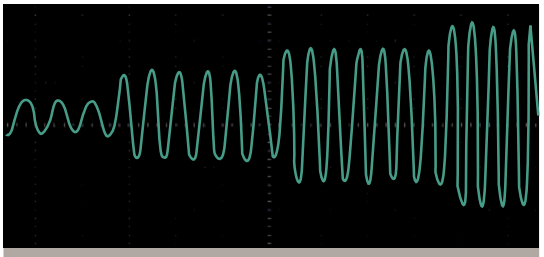
Adjustable phase angle

User can set the start and stop phase angle within range of 0~360°.This function is widely used for startup and shutdown current impact test or various rectifier performance test.

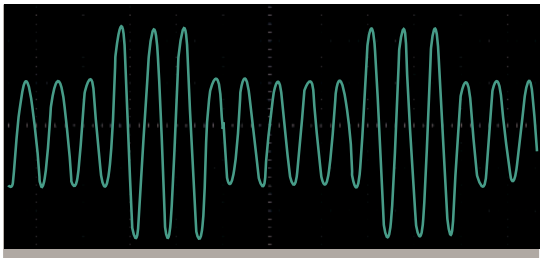


Power line disturbance simulation function

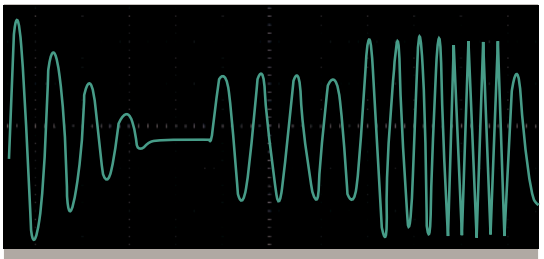
IT7300 series provides powerful functions to simulate all kinds of power line disturbance conditions. The STEP and PULSE modes offer a method to execute a single step or continuous output changes. The LIST Mode, up to 100 sequences, extends this function for more complex waveform generator needs. In this way, IT7300 series is capable of simulating all sorts of voltage dips, surge or trapped wave. The IT7300 series enables users to perform the pre - compliance tests against IEC 61000-4-11 and compliance test against IEC 61000-4-14/-4-28 immunity test regulations.



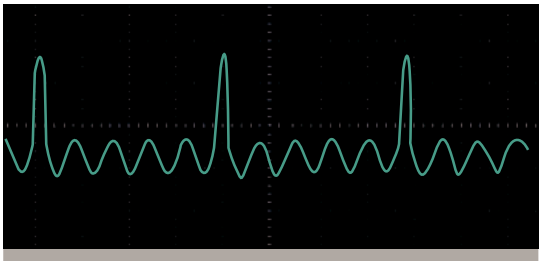
Step mode



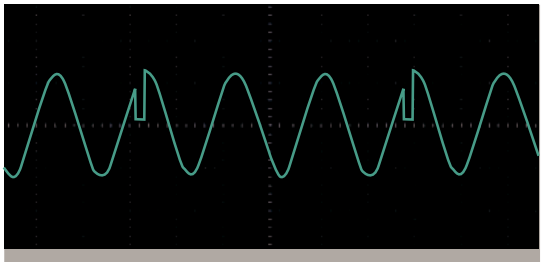
Pulse mode



List mode



Surge waveform



Trap wave

Built-in communication interface

An easy-to use rotary knob and self-guiding keypads allow you to set the output at your desired value without any effort. In addition, IT7300 series AC source has built-in RS232/USB/GPIB/LAN interface, providing customer high speed and stable communication quality.
Note: IT7321 do not have GPIB interface.

IT7300 software

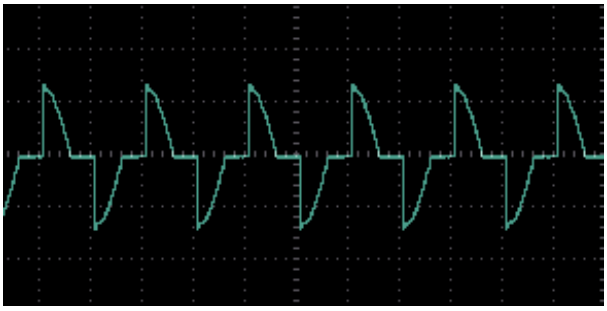
IT7000 software offers sweep test, list test, quick setting, phase dimmer test, report and save the data.

High stability

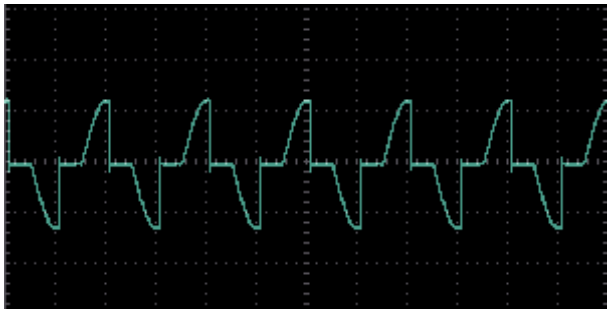
Based on professional high anti-environment disturbance technology, self-diagnosis design and OCP/OPP/OTP protections, this series power supply could work well even in bad environment. IT7300 AC power supply assists engineer to ensure quality for products.

TRIAC Dimmer simulation function

ITECH is the pioneer of TRIAC Dimmer function. This function is used to do dimming and speed regulating test for lamp or electric motor to ensure the products work well when controller of dimming and speed regulating is needed.



Front phase dimmer



Back phase dimmer

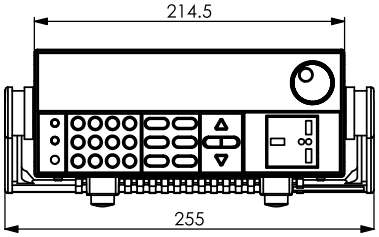
SWEEP function

This function tests efficiency of switch power supply and gets voltage and frequency value at max power. It could change voltage and frequency by setting start voltage value, end voltage value, stepping voltage value, start frequency, end frequency, stepping frequency and time of each step. Time unit of each step could be S, M, H. And it saves 10 files at most voltage, frequency and current of max power will be displayed when the test is over.

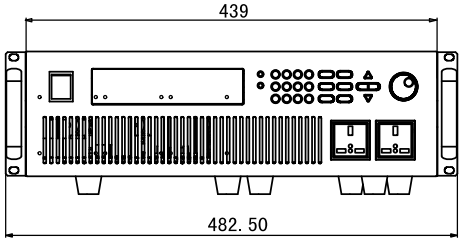
Specification

		IT7321	IT7322
INPUT			
Phase		1	1
Voltage		220Vac±10% 220Vac±10%	220Vac±10%
Frequency		47-63Hz	47-63Hz
Max.Current		8A	15A
Power Factor		0.5(typical)	0.7(typical)
AC OUTPUT			
Max.Power		300VA	750VA
Max Current(rms)	0-150V	3.0A	6A(0-150V)
	0-300V	1.5A	3A(0-300V)
Max Current(peak)	0-150V	12A	24A (0-150V)
	0-300V	6A	12A(0-300V)
Phase		1Φ/2W	1Φ/2W
Total Harmonic Distortion(T.H.D)		≤0.5% at 45-500Hz (Resistive Load)	≤0.5% at 45-500Hz (Resistive Load)
Crest Factor		≥4	≥4
Line Regulation		0.1% max for a ±10% line change	0.1% max for a ±10% line change
Load Regulation		≤0.5%FS(Resistive Load)	≤0.5%FS (Resistive Load)
Response Time		<100uS	<100uS
SETTING			
Voltage	Range	0-300V, 150/300V Auto	0-300V, 150/300V Auto
	Resolution	0.1V	0.1V
	Accuracy	±(0.2%+0.6V)	±(0.2% +0.6V)
Frequency	Range	45-500Hz	45-500Hz
	Resolution	0.1Hz at 45-99.9Hz 1Hz at 100-500Hz	0.1Hz at 45-99.9Hz 1Hz at 100-500Hz
	Accuracy	0.1Hz	0.1HZ
Phase Angle	Range	0-360°	0-360°
	Resolution	0.1°	0.1°
	Accuracy	±1°(45-65Hz)	±1°(45-65Hz)
MEASUREMENT			
Voltage(rms)	Range	0-300V	0-300V
	Resolution	0.1V	0.1V
	Accuracy	±(0.2%+0.6V)	±(0.2% + 0.6V)
Current(rms)	Range	L:120.0mA * M:1.200A * H:3.00A *	L:120.0mA/ M:1.200A/ H:3.00A
	Resolution	L:0.1mA M:1mA H:10mA	L:0.1mA/ M:1mA/ H:10 mA
	Accuracy	L:±(0.2%+0.4mA) M:±(0.2%+4mA) H:±(0.2%+20mA)	
Current(peak)	Range	0-12A	0-12A
	Resolution	0.01A	0.01A
	Accuracy	±(1%+120mA)	±(1% + 120mA)
Power	Resolution	L:0.01W M:0.1W H:1W	L:0.01W/ M:0.1W/ H:1W
	Accuracy	L:±(0.2%+0.05W) (47HZ-65HZ) M:±(0.2%+0.5W) (47HZ-65HZ) H:±(0.2%+2W) (47HZ-65HZ)	
GENERAL			
Memory		10 memories	10 memories
Sync Output Signal		Output Signal 5V,BNC type	Output Signal 5V, BNC type
Operation Environment		0-40℃/20-80%RH	0-40℃/20-80%RH
Dimension		½19″ 2U	19″ 3U
Interface		LAN/USB/RS232	LAN/USB/RS232/GPIB

*There are three levels of current, L-level, M-level and H-level. If Ipeak>300%(Full rms), low level will change to high level; if Ipeak<20%(full rms), M-level will change to L-level; if Ipeak<80%(full rms), H-level will change to M-level.



IT7321 Dimension



IT7322/IT7324 Dimension

Unit: mm

Specification

		IT7324	IT7326
INPUT			
Phase		1	1
Voltage		220Vac±10%	220Vac±10%
Frequency		47-63Hz	47-63Hz
Max.Current		30A	60A
Power Factor		0.7(typical)	0.7(typical)
AC OUTPUT			
Max.Power		1500VA	3000VA
Max Current(rms)	0-150V	12A(0-150V)	24A(0-150V)
	0-300V	6A(0-300V)	12A(0-300V)
Max Current(peak)	0-150V	48A (0-150V)	96A (0-150V)
	0-300V	24A(0-300V)	48A(0-300V)
Phase		1Φ/2W	1Φ/2W
Total Harmonic Distortion(T.H.D)		≤0.5% at 45-500Hz (Resistive Load)	≤0.5% at 45-500Hz (Resistive Load)
Crest Factor		≥4	≥4
Line Regulation		0.1% max for a ±10% line change	0.1% max for a ±10% line change
Load Regulation		≤0.5%FS (Resistive Load)	≤0.5%FS (Resistive Load)
Response Time		<100uS	<100uS
SETTING			
Voltage	Range	0-300V, 150/300V Auto	0-300V, 150/300V Auto
	Resolution	0.1V	0.1V
	Accuracy	±(0.2% +0.6V)	±(0.2% +0.6V)
Frequency	Range	45-500Hz	45-500Hz
	Resolution	0.1Hz at 45-99.9Hz 1Hz at 100-500Hz	0.1Hz at 45-99.9Hz 1Hz at 100-500Hz
	Accuracy	0.1HZ	0.1HZ
Phase Angle	Range	0-360°	0-360°
	Resolution	0.1°	0.1°
	Accuracy	±1°(45-65Hz)	±1°(45-65Hz)
MEASUREMENT			
Voltage(rms)	Range	0-300V	0-300V
	Resolution	0.1V	0.1V
	Accuracy	±(0.2% + 0.6V)	±(0.2% + 0.6V)
Current(rms)	Range	L:120.0mA/ M:1.200A/ H:3.00A	L:120.0mA/ M:1.200A/ H:12.00A
	Resolution	L:0.1mA/ M:1mA/ H:10 mA	L:0.1mA/ M:1mA/ H:10 mA
	Accuracy	L: ±(0.2%+0.4mA)/ M: ±(0.2%+4mA)/ H: ±(0.2%+20mA)	
Current(peak)	Range	0-12A	0-96A
	Resolution	0.01A	0.01A
	Accuracy	±(1% + 120mA)	±(1% + 120mA)
Power	Resolution	L:0.01W/ M:0.1W/ H:1W	L:0.01W/ M:0.1W/ H:1W
	Accuracy	L: ±(0.2%+0.05W) (47HZ-65HZ)/	M: ±(0.2%+0.5W) (47HZ-65HZ)/ H: ±(0.2%+2W) (47HZ-65HZ)
GENERAL			
Memory		10 memories	10 memories
Sync Output Signal		Output Signal 5V, BNC type	Output Signal 5V, BNC type
Operation Environment		0-40℃/20-80%RH	0-40℃/20-80%RH
Dimension		19″ 3U	19″ 6U
Interface		LAN/USB/RS232/GPIB	LAN/USB/RS232/GPIB

*There are three levels of current, L-level, M-level and H-level. If Ipeak>300%(Full rms), low level will change to high level; if Ipeak<20%(full rms), M-level will change to L-level; if Ipeak<80%(full rms), H-level will change to M-level.


IT7324


IT7326

Standard accessory

- Power cord
- Calibration report
- User manual