

AC Power Supply

Programmable AC Power Supply

AN61 series



500VA~2000VA

4000VA

3-phase power supply models

Introduction

AN61 series AC testing power supply adopts advanced SPWM technology, DSP digital processing technology and high-power switching power supply technology, domestic leading and international advanced in the field of AC power supply. This series of power supply is suitable for general commercial products, power electronics, aviation electronics, military and regulatory test, covering the range from bench tests to production line.

AN61 series AC test power supply have high quality AC, DC, AC + DC power output mode, providing precise power to AC/DC and rectifier load.

It can simulate voltage dips, short interruption, voltage variations immunity, harmonics or inter-harmonics

AN61 series AC testing power adopts advanced Digital Signal Processing (DSP) technology for accurate and rapid measuring of electrical parameters and harmonics, including Voltage Root Mean Square (Vrms), Current Root Mean Square (Irms), True Power, frequency (Hz), Power Factor (PF), current Crest Factor (CF) and 40-order current harmonics.

AN61 series AC testing power adopts pulse width modulation (PWM) technology to provide 6 times of peak current, forming the best test instrument for measuring inrush current. This AC testing power can set the angle of waveform switch machine for the test inrush current and output holding time, and also set the rates of change of the voltage and frequency, so as to scan the power input specification for the object under test.

With versatile programmable waveforms, The series of AC test power can be used for IEC 61000-4-11 (test before certification)/-4-13/-4-14/-4-28 regulation immunity test, in addition, it can output programmable impedance, which can be used for IEC 61000-3-2/-3-3 harmonic current limits and flicker test together with power analyzers. This series AC testing power becomes the best choice for IEC regulation test.

Main features

- ★ Advanced SPWM, DSP and high-power switching power supply, high power density
- ★ AC/DC/AC + DC output mode
- ★ Programmable output impedance for IEC61000-3-3 test
- ★ IEC61000-4-11, IEC61000-4-14, IEC61000-4-28 voltage/frequency change test
- ★ IEC61000-4-13 harmonic/sub-harmonic waveform synthesis test
- ★ High output peak current for surge current test
- ★ Pulse output for voltage dips test and simulation actual grid interference
- ★ Step output. The Step test mode provides automatic switch to change the output voltage step by step instead of gradually.
- ★ List output. In sequence test mode, the output waveform is the combination of all serial number configuration. The user can edit the desired output voltage sequence on demand.
- ★ Analog signal input interface for amplification of external signal
- ★ LCD display, compact, light, meeting requirements of standard cabinet installation
- ★ Parallel and Online for high-power test and 3-phase output
- ★ RS-232C/GPIB (optional)
- ★ Easy-to-use PC software (optional)

Order information and extended functions

- ★ AN61500(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/500VA, 1φ
- ★ AN61501(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/1000VA, 1φ
- ★ AN61502(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/2000VA, 1φ
- ★ AN61504(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/4000VA, 1φ
- ★ AN61800(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/500VA, 1φ (Without harmonic output)
- ★ AN61801(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/1000VA, 1φ (Without harmonic output)
- ★ AN61802(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/2000VA, 1φ (Without harmonic output)
- ★ AN61804(F) Programmable AC Test Power Supply 0~300V 15~1000HZ/4000VA, 1φ (Without harmonic output)

3-phase output models:

- ★ AN61700(F) 3-phase AC Test Power Supply 0~300V 15~1000HZ/ 1.5KVA, 3φ
- ★ AN61701(F) 3-phase AC Test Power Supply 0~300V 15~1000HZ/ 3KVA, 3φ
- ★ AN61702(F) 3-phase AC Test Power Supply 0~300V 15~1000HZ/ 6KVA, 3φ

Optional:

- ★ GPIB port
- ★ AN61 software

Spec.-1

Model	AN61500(F)	AN61501(F)	AN61502(F)	AN61504(F)	AN61800(F)	AN61801(F)	AN61802(F)	AN61804(F)	
Output phase	1	1	1	1	1	1	1	1	
Output power -AC power	500VA	1000VA	2000VA	4000VA	500VA	1000VA	2000VA	4000VA	
Voltage	Amplitude								
	150V/300V/Auto								
	Accuracy								
	0.2%+0.2%F.S.								
	Resolution								
	0.1V								
Max current	Degree of distortion								
	0.3% @ 50/60Hz 1% @ 15-1kHz								
	Source voltage effect features								
	0.1%								
	Load effect features								
	0.2%								
Max current	Effective value(150V/300V)	4A/2A	8A/4A	16A/8A	32A/20A	4A/2A	8A/4A	16A/8A	32A/20A
	Peak value	24A/12A	48A/24A	96A/48A	192A/96A	24A/12A	48A/24A	96A/48A	192A/96A
Frequency	Amplitude								
	DC, 15 ~ 1kHz								
	Accuracy								
0.15%									
Resolution									
0.1 Hz									
Rated output-DC	Power	250W	500W	1000W	2000W	250W	500W	1000W	2000W
	Voltage	212V/424V	212V/424V	212V/424V	212V/424V	212V/424V	212V/424V	212V/424V	212V/424V
	Current(212V/424V)	2A/1A	4A/2A	8A/4A	16A/8A	2A/1A	4A/2A	8A/4A	16A/8A
Programmable output impedance amplitude		0Ω +200μH ~ 1Ω +1mH							
Harmonic & inter-harmonics simulation bandwidth		2400Hz	2400Hz	2400Hz	2400Hz	----	----	----	----
Rated input	Voltage amplitude	90~250V, 1φ	90~250V, 1φ	90~250V, 1φ	190~250V, 3φ*3	90~250V, 1φ	90~250V, 1φ	90~250V, 1φ	190~250V, 3φ*3
	Rated frequency	47~63Hz							
	Current	8A Max. @90V	16A Max. @90V	28A Max. @90V	14A Max. @190V	8A Max. @90V	16A Max. @90V	28A Max. @90V	14A Max. @190V
	Power factor	0.97 Min.	0.97 Min.	0.97 Min.	0.98 Min.	0.97 Min.	0.97 Min.	0.97 Min.	0.98 Min.
Voltage measurement	Amplitude								
	150V/300V								
	Accuracy								
0.2%+0.2%F.S.									
Resolution ratio									
0.1V									
Current	Amplitude(peak value)	24A	48A	96A	192A	24A	48A	96A	192A
	Accuracy(effective+value)	0.4%+0.3%F.S.							
	Accuracy (peak value)	0.4%+0.6%F.S.							
Power	Accuracy	0.4%+0.4%F.S.							
	Resolution	0.1W							
Harmonic Amplitude		2~40 hypo-	2~40 hypo-	2~40 hypo-	2~40 hypo-	----	----	----	----
COM		RS-232 (standard), GPIB(Optional)							
Operating environment		0 ~ 40°C / 30-90%RH							
Storage environment		-40 ~ +85°C							
Safety&EMC		AN60 series with CE certificate							
Dimension (W×H×D)		483×134×610mm			483×268 ×610mm	483×134×610mm			483×268 ×610mm
Weight(without packaging)		21kg			40kg	21kg			40kg

Spec.-2

Model	AN61700(F)	AN61701(F)	AN61702(F)	
Output phase	3	3	3	
Output power-AC	Max power	1500VA	3000VA	
	Each phase output	500VA	1000VA	
Voltage(each phase)	Amplitude	150V/300V		
	Accuracy	0.2%+0.2%F.S.		
	Resolution	0.1V		
	Distortion	0.3% @ 50/60Hz	1% @ 15-1kHz	
	Source voltage	0.1%		
	Load effect	0.2%		
	Temperature coefficient	0.02%/°C (On the basis of the 25 C)		
Max current	Effective value(150V/300V)	4A/2A (150V/300V)	8A/4A (150V/300V)	
	Peak value	24A/12A (150V/300V)	48A/24A (150V/300V)	
Frequency	Amplitude	15 ~ 1kHz		
	Accuracy	0.15%		
Triphase input	Voltage amplitude	90~250V		
	Frequency amplitude	47~63Hz		
	Current	8A Max.	16A Max.	
	Power factor	0.97Min.		
Voltage measurement	Amplitude	150V/300V		
	Accuracy	0.2%+0.2%F.S.		
	Resolution	0.1V		
Current (each phase)	Amplitude (peak value)	24A	48A	
	Accuracy (effective value.)	0.4%+0.3%F.S.		
	Accuracy (peak value)	0.4%+0.6%F.S.		
	Resolution	0.01A		
Power (each phase)	Accuracy	0.4%+0.4%F.S.		
	Resolution	0.1W		
Efficiency	68%	77%	83%	
Dimension (W×H×D)	650×515×700mm			
Weight(without packaging)	120kg			
Defensive function	overvoltage, overcurrent, overpower, over heat, fault protection of fan			
Operating environment	0°C~45°C/30%~95%RH			
Storage environment	-40°C~85°C/30%~95%RH			
Safety & EMC	AN60 series with CE certificate			