Exceeding & Trustworthy AC Power Supply \\\ Ainuo

Programmable AC Power Supply
AN61(F) Series

Product Introduction

The AN61(F) series AC Power Supply adopts advanced SPWM technology, DSP digital processing technology and high-power switching power supply technology, can output AC, DC, AC+DC power and provide AC load, DC load and rectification load with precise power input. It has the ability of offering 6 times peak current and is optimal test instrument of measuring the surge current, and can be used to set the angle of waveform switch for testing the surge current and output holdup time. It can also be used to set the fluctuation ratio of voltage and frequency for scanning the range of power input to be tested.

AN61(F) series product can simulate abnormal instantaneous rise, instantaneous drop, short circuit, jitter and others of electric supply, with the superposition function of harmonic waves or indirect harmonic waves, simulate the waveform distortion of electric supply, can also provide accurate and quick measurement of power parameters and harmonic waves. The AN61(F) series AC Power Supply with excellent power output quality widely applied for the labs and production lines in power electronics, military, avionics, IEC standard test and other industries.

AN61(F) series AC Power Supply possesses strong programmable function, can complete the immunity test of IEC61000-4-11(test before certification) /-4-13/-4-14/-4-28 standard. Also, its programmable output impedance, together with the power analyzer, can complete the test of IEC61000-3-2/-3-3 harmonic wave current limit and flicker and is optimal choice of IEC standard test.

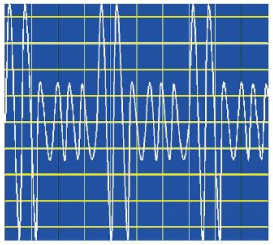
Features

- Advanced SPWM, DSP and high-power switching power supply, high power density
- AC/DC/AC + DC output mode (only for AN615(F) series and AN618(F) series)
- 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.
- Sequence 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 amplificaiton of external signal
- LCD display, compact, light, meeting requirements of standard cabinet installation
- Standard RS232 port, optional RS485, GPIB, Ethernet port.

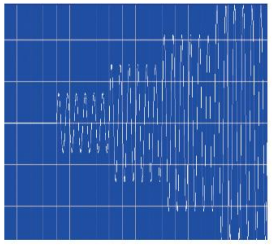
Applications

Simulate power supply input interference

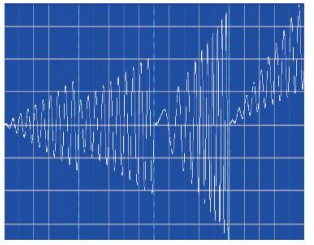
Pulse, step, sequence and other output modes, simulating of any output wave in one step or continuously to simulate power grid fluctuation and kilodisturbance for testing the tested object.



Pulse mode



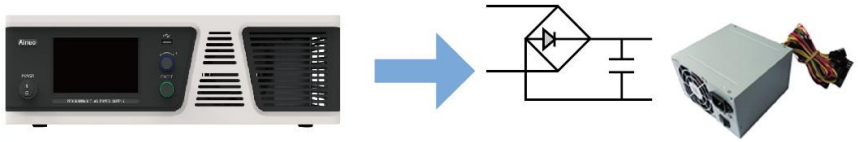
Step mode



Sequence mode

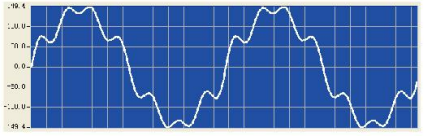
Testing of switching power supply inrush current

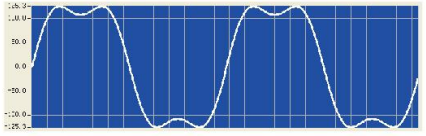
Free setting of start/stop angles through the output wave, peak current output up to 6 times, the AN61(F) series power supply is an ideal device for testing the inrush current of the switching power supply.



Harmonic and inter-harmonic synthesis (only for AN615(F) series)

Superimposing of 2-40th harmonics and inter-harmonics, so as to conduct comprehensive harmonic simulation tests.





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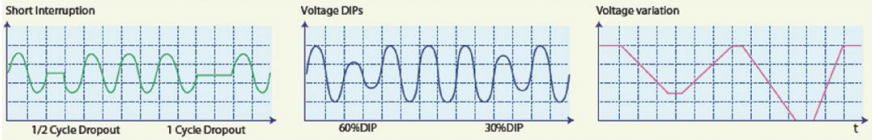
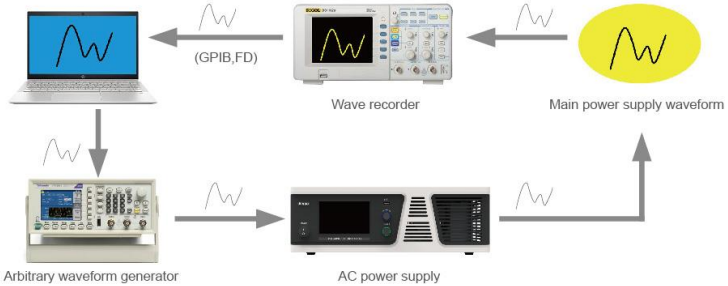
IEC Regulation test

Output of test voltage that meets IEC test conditions. Additionally, the software of host has a built-in test flow of IEC related test regulations to facilitate quick set up and use.

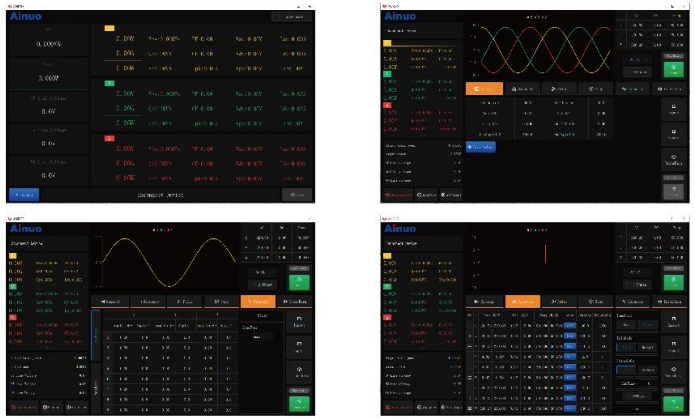


Free wave amplification (only for AN615(F) series and AN618(F) series)

The AN61(F) series AC test power supply can amplify power of any wave through the specific external port. The customer can record the actual wave on site using the wave recorder, and then send it to the specific external port of AN61 power supply via the wave generator for power amplification, so that the customer can simulate the actual wave on site to test the product under test.



Control software of host



Specifications

Model			AN615 00-350(F)	AN615 01-350(F)	AN615 02-350(F)	AN615 04-350(F)	AN615 06-350(F)	AN618 00-350(F)	AN618 01-350(F)	AN618 02-350(F)	AN618 04-350(F)	AN618 06-350(F)
AC Input	Capacity		500VA	1000VA	2000VA	4000VA	6000VA	500VA	1000VA	2000VA	4000VA	6000VA
	Voltage		90～250V Single-Phase 2 wires +PE			Phase Voltage: 198~250V 3-Phase 4 wires +PE		90～250V Single-Phase 2 wires +PE			Phase Voltage: 198~250V 3-Phase 4 wires +PE	
	Current		8A Max @90V	16A Max @90V	28A Max @90V	18A Max @198V	25A Max @198V	8A Max @90V	16A Max @90V	28A Max @90V	18A Max @198V	25A Max @198V
	Frequency		47～63Hz									
	Power factor #1		0.97 Min			0.98 Min		0.97 Min			0.98 Min	
AC Output	Phase		Single phase									
	Power		500VA	1000VA	2000VA	4000VA	6000VA	500VA	1000VA	2000VA	4000VA	6000VA
	Voltage	Range	Low gear: 0.0～175.0V, High gear: 0.0～350.0V; Low/High/Auto									
		Resolution	0.01V									
		Accuracy	0.2%+0.2%F.S.									
		Distortion #2	0.3%@50/60Hz; 1%@15～1000Hz									
		Source voltage effect #3	≤0.1%									
		Load effect #4	≤0.2%									
	Effective value of current	0-175V	5A	10A	20A	40A	60A	5A	10A	20A	40A	60A
		0-350V	2.5A	5A	10A	20A	30A	2.5A	5A	10A	20A	30A
	Peak current	0-175V	20A	40A	80A	160A	240A	20A	40A	80A	160A	240A
		0-350V	10A	20A	40A	80A	120A	10A	20A	40A	80A	120A
	Frequency	Range/Resolution /Accuracy	15～1000Hz, 0.001Hz, 0.15%									
DC Output	Power		250W	500W	1000W	2000W	3000W	250W	500W	1000W	2000W	3000W
	Voltage	Range	Low gear: -247.5V～247.5V, High gear: -495.00V～495.00V; Low/High/Auto									
	Current	-247.5~247.5V	2.5A	5A	10A	20A	30A	2.5A	5A	10A	20A	30A
		-495.0~495.0V	1.25A	2.5A	5A	10A	15A	1.25A	2.5A	5A	10A	15A
Testing Accuracy	Voltage	Range/Resolution /Accuracy	AC: 350.00V, DC: 495.00V; 0.01V; 0.2%+0.2%F.S.									
	Current	Range	24A	48A	96A	160A	240A	24A	48A	96A	160A	240A
		Resolution	0.01A									
		Accuracy of effective value	0.4%+0.6%F.S.									
		Accuracy of peak current	0.4%+0.6%F.S.									
	Power	Resolution/Accuracy	0.01W; 0.4%+0.6%F.S.									
Function	Harmanic		2~40 times					None				
	Simulation bandwidth of harmonic and interharmonic		2400Hz					None				
	Programmable output impedance		0Ω+0μH～1Ω+1mH									
	Programming		Pulse mode, step mode, sequence mode									
	Communication		RS232(Standard)、RS485(Optional)、GPIB(Optional)、Ethernet(Optional)									
Security & EMC			CE									
Environment	Temperature		0～40℃									
	Humidity		30～90%RH									
Dimension W×H×D(mm)			432×134×630			432×222×640		432×134×630			432×222×640	
			The width does not include hanging ears(24mm); The height does not include the machine foot(15mm, removable); The depth does not include the handle(50mm).									
Weight (Kg)			≤21			≤40		≤21			≤40	

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Specifications

Model			AN61700(F)	AN61701(F)	AN61702(F)	AN61704(F)	AN61706(F)
Capacity			1500VA	3000VA	6000VA	12kVA	18kVA
Input	Voltage		Phase voltage:190～250V 3-phase 4-wires+PE				Phase Voltage:198~250V 3-Phase 4 wires+PE
	Current		4A Max@190V	8A Max@190V	14A Max@190V	28A Max@190V	42A Max@198V
	Frequency		47～63Hz				
	Power factor #1		0.97 Min			0.98 Min	
AC Output	Phase		Three-phase & single-phase				
	Power	Total power	1500VA	3000VA	6000VA	12kVA	18kVA
		Per phase power	500VA	1000VA	2000VA	4000VA	6000VA
	Voltage	Range	Low gear: 0.0～150.0V, High gear: 0.0～300.0V				
		Gear	Low gear/High gear/Auto gear				
		Resolution	0.1V				
		Accuracy	0.2%+0.2%F.S.				
		Distortion #2	0.3%@50/60Hz；1%@15～1000Hz				
		Source voltage effect #3	≤0.1%				
		Load effect #4	≤0.2%				
	Effective value of current	0-150V	4A(Three phase mode) 12A(Single phase mode)	8A(Three phase mode) 24A(Single phase mode)	16A(Three phase mode) 48A(Single phase mode)	32A(Three phase mode) 96A(Single phase mode)	60A(Three phase mode) 180A(Single phase mode)
		0-300V	2A(Three phase mode) 6A(Single phase mode)	4A(Three phase mode) 12A(Single phase mode)	8A(Three phase mode) 24A(Single phase mode)	16A(Three phase mode) 48A(Single phase mode)	30A(Three phase mode) 90A(Single phase mode)
	Peak current	0-150V	24A(Three phase mode) 72A(Single phase mode)	48A(Three phase mode) 144A(Single phase mode)	96A(Three phase mode) 288A(Single phase mode)	192A(Three phase mode) 576A(Single phase mode)	240A(Three phase mode) 720A(Single phase mode)
		0-300V	12A(Three phase mode) 36A(Single phase mode)	24A(Three phase mode) 72A(Single phase mode)	48A(Three phase mode) 144A(Single phase mode)	96A(Three phase mode) 288A(Single phase mode)	120A(Three phase mode) 360A(Single phase mode)
	Frequency	Range	15～1000Hz(Three phase mode)；30-100Hz(Single phase mode)				
		Resolution	0.1Hz				
		Accuracy	0.15%				
Testing Accuracy	Voltage	Range	300V				
		Resolution	0.1V				
		Accuracy	0.2%+0.2%F.S.				
	Current	Range	24A(Three phase mode) 72A(Single phase mode)	48A(Three phase mode) 144A(Single phase mode)	96A(Three phase mode) 288A(Single phase mode)	192A(Three phase mode) 576A(Single phase mode)	240A(Three phase mode) 720A(Single phase mode)
		Resolution	0.01A				
		Accuracy of effective value	0.4%+0.6%F.S.				
		Accuracy of peak current	0.4%+0.6%F.S.				
	Power	Resolution	0.1W				
		Accuracy	0.4%+0.6%F.S.				
Function	Programming		Pulse mode, step mode, sequence mode				
	Communication		RS232(Standard)、RS485(Optional)、GPIB(Optional)、Etherent(Optional)				
Security&EMC			CE				
Environment	Temperature		0～40℃				
	Humidity		30～90%RH				
Dimension W×H×D(mm)			515×650×700			515×1075×700	515×1075×800
Weight (Kg)			≤120			≤180	≤210

Notes:

#1. The power factor is the measurement results at rated power when the input phase voltage is 220VLN and the resistive load is used for output;

#2. The distortion degree is the measurement result at the rated power when the output voltage is 250V and the resistive load is used;

#3. The source effect is calculated under no load condition in one of following two cases, the input rated voltage is 380VLL, and the voltage is 420VLL.

#4. The load effect is calculated according to the output measurement results under nominal power in the following conditions, the output voltage of 250V, no-load measurement output voltage, and resistive load;

#5. For the FS appearing in the parameters related to AC voltage and DC voltage in the parameter table, it refers to the corresponding maximum AC and DC output voltage values given in the voltage measurement range of corresponding machine models;

#6. For the FS appearing in parameters related to current in the parameter table, it refers to the effective value and peak value of maximum measuring current given in the current measuring range of the corresponding machine models;

#7. For the FS appearing in parameters related to power in the parameter table, it refers to the maximum measured power value of the corresponding machine model;

The above specifications are subject to change without prior notice. Subject to the delivered power supply parameters.

Safety Analyzer
AC Power Supply
DC Power Supply
Bidirectional DC Power Supply
Power Analyzer
Motor Test Scheme
Electronic Load