

Wide Range Programmable DC Testing Power AN53 Series



AN53 series wide range programmable dc power supply. Input: 198V~242VAC, 340V~420VAC; Output: 80V, 300V, 500V, 750V, 1000V, 1500V, or customize according to your needs.

- [Technical Parameters](#)

The AN53(F) series DC Testing Power adopts Active Power Factor Correction technology, high frequency LLC multi-resonant soft switching inverter technology, to achieve high power factor, fast dynamic response, low output ripple, high power density, and Constant Power (CP) wide range output. It has small size, light weight, low noise, high efficiency and easy operation etc. It can be used for manufacturing, testing and maintenance of electronic equipment such as aircraft and airborne equipment, radar and navigation etc, as well as industrial and mining enterprises, college laboratories, institutes and so on.

Features:

Wide range output up to 3 times of "matrix" power supply of same power.

Active Power Factor Correction, full load power factor of more than 0.99.

High frequency LLC multi-resonant inverter with efficiency up to 0.93.

Industrial best transient response speed.

Constant Voltage (CV), Constant Current (CC) and Constant Power (CP) output for multi applications.

Powerful programmable function, flexible settings.

Built-in precise voltage/current measurement, stable output.

Lead drop compensation terminal for output lead at large current.

Complete protection for normal operation of power supply unit and load security.

High brightness color LCD display, beautiful, simple, intuitive.

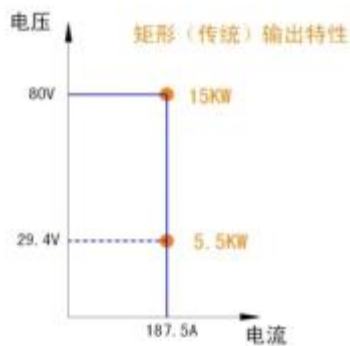
Supports parallel output, expanding power/current range.

Multiple equipment can be flexibly configured as single output or parallel output.

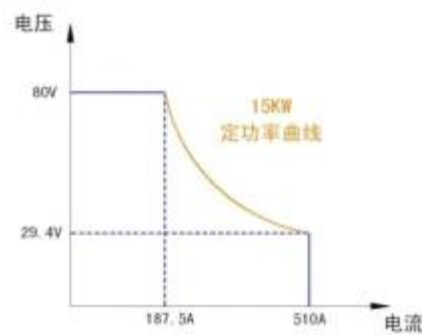
Standard host software.

Functions:

The power output curve of AN53(F) series is extended to provide users with a wider range of voltage/current, more flexible than traditional "matrix" output range. The output range of single Constant Power (CP) DC power is times of common matrix power. For example, 80V/510A/15kW models of the AN53 series can provide 80V/187.5A output at 15kW power, or 29V/510A output at 15kW. For traditional "matrix" output power, the technical index will be 80V/187.5A/15kW. When the output voltage is 29.4V, the maximum current is still 187.5A, and the power is only 5.5kW.



Common "matrix" power output



AN53 series power output

Order and extension:

AN5380-120S(F): 80V/120A/1800W

AN5380-170S(F): 80V/170A/3000W

AN5380-170(F): 80V/170A/5000W

AN5380-340(F): 80V/340A/10000W

AN5380-510(F): 80V/510A/15000W

AN5300-15S(F): 300V/15A/1800W

AN53300-30S(F): 300V/30A/3000W

AN53300-50(F): 300V/50A/5000W

AN53300-100(F): 300V/100A/10000W

AN53300-150(F): 300V/150A/15000W

AN53500-30(F): 500V/30A/5000W

AN53500-60(F): 500V/60A/10000W

AN53500-90(F): 500V/90A/15000W

AN531000-30(F): 1000V/30A/10000W

AN531500-30(F): 1500V/30A/15000W

Parallel mode, expanding the output range of current and power.

Specifications of AN5380(F) series:

Model		AN5380-120S(F)	AN5380-170S(F)	AN5380-170(F)	AN5380-340(F)
Input	Voltage	Single phase +PE, 198V~242VAC		3-phase 3-wire +PE, 340V~420VAC	
	Frequency	47-63HZ			
Output	Voltage	0~80V			
	Current	0~120A	0~170A	0~170A	0~340A
	Power	0~1.8KW	0~3KW	0~5KW	0~10KW
Display Mode		4.3'' color LCD			
Testing accuracy	Voltage	$\leq 0.15\%U_{max}$, Resolution: 0.01V			
	Current	$\leq 0.3\%I_{max}$, Resolution: 0.01A (>1000A, 0.1A)			
	Power	$\leq 1\%P_{max}$, Resolution: 0.001kW (>100kW, 0.01kW)			
Ripple and Noise 20Hz~20MHz	V _{rms}	30mV		40mV	
	V _{pp}	200mV		250mV	
Load effect		Voltage $\leq 0.05\%U_{max}$, Current $\leq 0.15\%I_{max}$			
Source effect		Voltage $\leq 0.02\%U_{max}$, Current $\leq 0.05\%I_{max}$			
Transient response time		$\leq 2ms$			
Rise time 100%		50ms (10%-90%)			
Max output voltage drop compensation		6.5V			
Communication		Standard RS232, Optional RS485、CAN、LAN、GPIB、Analog interface			
Protection		reverse, current limiting, S terminal compensation, Input phase loss protection, output overvoltage, overheat, short circuit protection			
Parallel		Support multiple parallel outputs to expand the power/current range			
Environment		Temperature: 0~40°C; Humidity: 20~90%RH			
Dimension W×H×D (mm)		440×133×350		440×133×600	
Weight		16kg		17kg 27kg	

Specifications of AN53300(F) series:

Model	AN53300-15S(F)	AN53300-30S(F)	AN53300-50(F)	AN53300-100(F)
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Input	Voltage	Single phase +PE , 198V~242VAC		3-phase 3wire +PE, 340V~420VAC	
	Frequency	47-63HZ			
Output	Voltage	0~300V			
	Current	0~15A	0~30A	0~50A	0~100A
	Power	0~1.8kW	0~3kW	0~5kW	0~10kW
Display Mode		4.3'' color LCD			
Testing accuracy	Voltage	$\leq 0.15\%U_{max}$, Resolution: 0.01V			
	Current	$\leq 0.3\%I_{max}$, Resolution: 0.01A (>1000A, 0.1A)			
	Power	$\leq 1\%P_{max}$, Resolution: 0.001kW (>100kW, 0.01kW)			
Ripple and Noise 20Hz~20MHz	Vrms	60mV			
	Vpp	450mV			
Load effect	voltage $\leq 0.05\%U_{max}$, current $\leq 0.15\%I_{max}$				
source effect	voltage $\leq 0.02\%U_{max}$, current $\leq 0.05\%I_{max}$				
Transient response time	$\leq 2ms$				
Rise time 100%	50ms (10%-90%)				
Max output voltage drop compensation	6.5V				
Communication	Standard RS232, Optional RS485、CAN、LAN、GPIB、Analog interface				
Protection	reverse, current limiting, S terminal compensation, Input phase loss protection, output overvoltage, overheat, short circuit protection				
Parallel	Support multiple parallel outputs to expand the power/current range				
Environment	Temperature: 0~40°C; Humidity: 20~90%RH				
Dimension W×H×D (mm)	440×133×350			440×133×600	
Weight	16 kg			17kg	27kg

Specifications of AN53500(F) series:

Model	AN53500-30(F)		AN53500-60(F)	AN53500-90(F)
Input	3-phase 3-wire +PE , 340V~420VAC, 47-63HZ			
Output	Voltage	0~500V		
	Current	0~30A	0~60A	0~90A
	Power	0~5kW	0~10kW	0~15kW
Display mode	4.3'' color LCD			
Test accuracy	Voltage	$\leq 0.15\%U_{max}$, Resolution: 0.01V		
	Current	$\leq 0.3\%I_{max}$, Resolution: 0.01A		
	Power	$\leq 1\%P_{max}$, Resolution: 0.001kW (>100kW, 0.01kW)		
Ripple and Noise 20Hz~20MHz	Vrms	80mV		
	Vpp	700mV		
Load effect	Voltage: $\leq 0.05\%U_{max}$, Current: $\leq 0.15\%I_{max}$			
Source effect	Voltage: $\leq 0.02\%U_{max}$, Current: $\leq 0.05\%I_{max}$			
Transient response time	$\leq 2ms$			
Rise time 100%	50ms (10%-90%)			
Max output voltage drop compensation	25V			
Communication	Standard RS232, Optional RS485、CAN、LAN、GPIB、Analog interface			
Protection	reverse, current limiting, S terminal compensation , Input phase loss protection, output overvoltage, overheat, short circuit protection			
Parallel	Support multiple parallel outputs to expand the power/current range			
Environment	Temperature: 0~40°C; Humidity: 20~90%RH			
Dimension W×H×D (mm)	440×133×600			
Weight	17kg	27kg	37kg	

Specifications of AN53750(F) series:

Model	AN53750-20(F)		AN53750-40(F)	AN53750-60(F)
Input	3-phase 3-wire +PE , 340V~420VAC, 47-63HZ			
Output	Voltage	0 ~ 750V		
	Current	0 ~ 20A	0 ~ 40A	0 ~ 60A
	Power	0 ~ 5kW	0 ~ 10kW	0 ~ 15kW
Display mode	4.3' ' color LCD			
Test accuracy	Voltage	≤0.15%Umax, Resolution: 0.01V		
	Current	≤0.3%Imax, Resolution: 0.01A		
	Power	≤1%Pmax, Resolution: 0.001kW (> 100kW, 0.01kW)		
Ripple and Noise 20Hz~20MHz	Vrms	200mV		
	Vpp	800mV		
Load effect	Voltage: ≤0.05%Umax, Current: ≤0.15%Imax			
Source effect	Voltage: ≤0.02%Umax, Current: ≤0.05%Imax			
Transient response time	≤2ms			
Rise time 100%	50ms (10%-90%)			
Max output voltage drop compensation	25V			
Communication	Standard RS232, Optional RS485, CAN, LAN, GPIB, Analog interface			
Protection	reverse, current limiting, S terminal compensation , Input phase loss protection, output overvoltage, overheat, short circuit protection			
Parallel	Support multiple parallel outputs to expand the power/current range			
Environment	Temperature: 0~40°C; Humidity: 20~90%RH			
Dimension W×H×D (mm)	440×133×595			
Weight	17kg	27kg	37kg	

Specifications of AN531000(F)/1500(F) series

Model	AN531000-30(F)		AN531500-30(F)
Input	3-phase 3-wire +PE, 340V~420VAC, 47-63Hz		
Output	Voltage	0 ~ 1000V	
	Current	0 ~ 30A	0 ~ 1500V
	Power	0 ~ 10kW	0 ~ 15kW
Testing accuracy	Voltage	≤0.15%Umax, Resolution 0.01V (> 1000V, 0.1V)	
	Current	≤0.3%Imax, Resolution 0.01A	
	Power	≤1%Pmax, Resolution 0.001kW (> 100kW, 0.01kW)	
Ripple and Noise 20Hz~20MHz	Vrms	350mV	400mV
	Vpp	1600mV	2400mV
Load effect	Voltage≤0.05%Umax, Current≤0.15%Imax		
Source effect	Voltage≤0.02%Umax, Current≤0.05%Imax		
Transient response time	≤2ms		
Rise time 100%	50ms (10%-90%)		
Max output voltage drop compensation	25V		
Communication interface	Standard RS232, Optional RS485, CAN, LAN, GPIB, Analog interface		
Protection	reverse, current limiting, S terminal compensation , Input phase loss protection, output overvoltage, overheat, short circuit protection		
Parallel	Support multiple parallel outputs to expand the power/current range		
Environment	Temperature: 0~40°C; Humidity: 20~90%RH		
Dimension W×H×D (mm)	440×133×600		
Weight	27kg	37kg	
Remark	The current range of models above 1000V can be customized for 40A		