DC Power Supply

Programmable DC Power Supply

AN510 series

This AN51XXX series programmable DC power supply is designed in various models with the voltage up to 1000V, power up to 1MW, adopting high-frequency switching and advanced control technology, featuring super high power density, full series standard cabinet, low ripple, high accuracy and fast dynamic response speed. An attractive appearance, small size, high performance, multi-function, simple operation with international advanced level of DC power supply, widely used in power electronics, DC motor testing, automatic integration test system, medical equipment, industries, batteries charging and simulation, hybrid cars and solar inverter testing, laboratories and institutes etc.

Main features

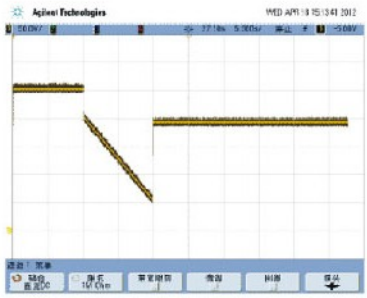
★ High-power density, 3U standard chassis, power capacity up to 15kW
★ Wide voltage output range 0-1000V, single unit power capacity range 5kw-15kW
★ 10 units combination up to 1MW
★ Fast transient response function
★ High accuracy, adopts 16 bits AD, low ripple wave
★ VFD display, flexible interface, Chinese/English operation
★ Flexible and super List test function, 20 steps/ list, 50 lists in total
★ Complete protection, reliable safety performance
★ Analog control interface, able to control output independently through external analog interface of power supply
★ Provide solar array I-V curve, simulate solar battery output character and different I-V curve under different temperature

Order information and extended functions

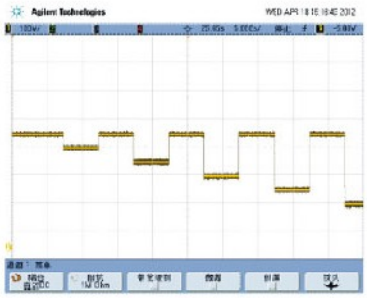
★ AN51005-300(F): 300V/16A/5kW
★ AN51010-300(F): 300V/33A/10kW
★ AN51015-300(F): 300V/50A/15kW
★ AN51005-600(F): 600V/8A/5kW
★ AN51010-600(F): 600V/17A/10kW
★ AN51015-600(F): 600V/25A/15kW
★ AN51005-1000(F): 1000V/5A/5kW
★ AN51010-1000(F): 1000V/10A/10kW
★ AN51015-1000(F): 1000V/15A/15kW

Main features

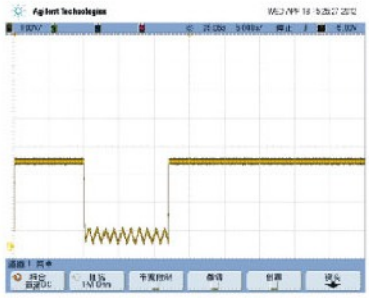
★ List test, simulate various of comprehensive waveform



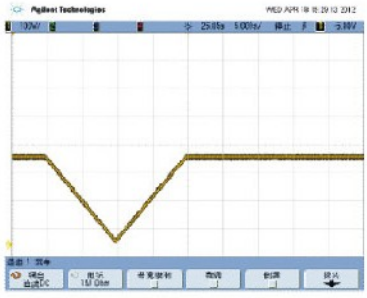
Simulate battery voltage dips experiment



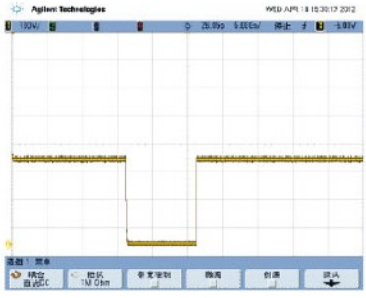
ISO 16750-2 voltage drop rest experiment



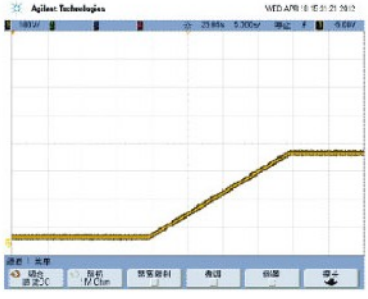
ISO 16750-2 start voltage curve experiment



Simulate battery voltage ramp experiment

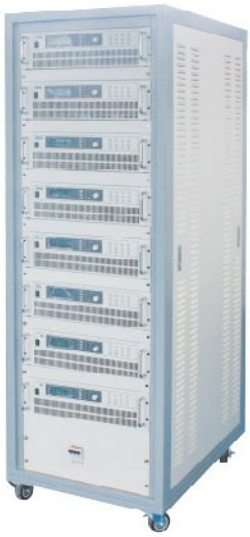


Communication power supply input dips experiment



Output voltage rising slope control

★ High power in parallel, satisfy power electronic, rail way transportation, electrolytic plating, DC motor, PV testing requirements



Spec.

Model		AN51005-300(F)	AN51010-300(F)	AN51015-300(F)	AN51005-600(F)	AN51010-600(F)	AN51015-600(F)	AN51005-1000(F)	AN51010-1000(F)	AN51015-1000(F)
Input		three phase three wires, 380V±38V,47Hz~63Hz								
Output	Voltage	0～300V			0～600V			0～1000V		
	Current	0～16A	0～33A	0～50A	0～8A	0～17A	0～25A	0～5A	0～10A	0～15A
	Power	0～5KVA	0～10KVA	0～15KVA	0～5KVA	0～10KVA	0～15KVA	0～5KVA	0～10KVA	0～15KVA
Display		VFD，display in both English and Chinese， 5 digits								
Setting accuracy	Voltage	≤±0.15% F.S,resolution is 0.1V						≤±0.2% F.S,resolution is 0.1V;		
	Current	≤±0.4% F.S, resolution is 0.1A						≤±0.8% F.S, resolution is 0.1A		
Measurement accuracy	Voltage	≤±0.15% F.S,resolution is 0.01V						≤±0.2% F.S,resolution is 0.01V;		
	Current	≤±0.4% F.S,resolution is 0.01A						≤±0.8% F.S, resolution is 0.01A		
Ripple&Noise 20Hz~20mHz	Vrms	50mV			60mV			1950mV		
	Vpp	300mV			350mV			2550mV		
Power effect		voltage: ±0.01% F.S; current:±0.05% F.S（380VAC ±10%×input，load invariant）								
Load effect		voltage: ±0.02% F.S; current:±0.1% F.S（380VAC ±10%×input，load invariant）								
Noise		≤65db(A)								
Effciency		≥ 0.87 (380VAC input, full load)								
Remote analog accuracy		Voltage：±0.25%F.S(0-5V),0.5% F.S(0-10V) Current：±0.8% F.SOVP：±1% F.S						Voltage：±0.4%F.S(0-5V), 0.8% F.S(0-10V) Current：±1% F.S; OVP：±1% F.S		
Protection		Lack phase protect, output OV protect, over heat protect, short circuit protect.								
Transient response time		1ms								
Max. Line voltage drop compensation		5% (40V～100V);2%(>100V)								
Communication		RS232								
Memory function		Can preset 10 groups parameters								
Temperature drifts		Voltage:0.02%Vmax/℃; Current:0.03%Vmax/℃								
Time drifts		±0.05%×setting (After 8 hours aging, constant load and temperature, connect sense)								
Operating environment		Temperature:0℃～50℃ Humidity:10-95%,No condensation, storage temperature:-25~65℃								
Dimension(W×H×D)		429×132×610mm, standard 3U case								
Weight(without packaging)		27kg	32kg	37kg	27kg	32kg	37kg	27kg	32kg	37kg
Remark		1.Programmable and reading accuracy condition:(25℃±5℃) 2.Load change from 100% to 5%or 50% to 100%, output voltage returning to ±0.75% of "rated value" 3.Temperautre drifts:output voltage chagne rate is caused by temperature chagne under power supply using condition								