



Consumption unit of AC load  
Quick tracking waveform generator of AC load  
Trapezoidal waveform generator based on integrating circuit



### Main features

- ★ CE
- ★ Power Capacity: 1400W ~ 8400W
- ★ Working voltage is low to 2V, and up to 350Vrms
- ★ Current range: 10Arms ~ 60Arms, peak current: 45A ~ 270A
- ★ Frequency range: 44 ~ 1000Hz, DC
- ★ Peak factor: 1.4 ~ 5.0000
- ★ Adjustable power factor, setting range 0-1.0
- ★ 3 units in parallel to realize 3 phase load
- ★ Work mode: Constant current CC, constant resistance CR, constant power CP
- ★ Current shift: current shift can be adjusted under testing
- ★ DC: Static loading, dynamic loading, 40 programming steps
- ★ AC: Waveform simulation, sine, 3-15 harmonic, phase gate, crest factor
- ★ Upper/lower limits adjustment, over limit alarming(GO/NG)
- ★ Remote voltage detect sense port, used for precise measurement, eliminate wires voltage drop
- ★ Protection function: Over voltage, over current, over power, over heat, DC reversed polarity
- ★ Measurement parameter: U, I, P, F and PF

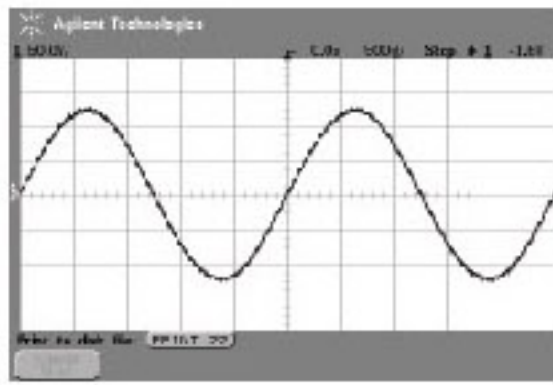
### Order information and extended functions

- ★ AN29201(F): AC/DC Electronic Load 260V/10A/1400W
- ★ AN29202(F): AC/DC Electronic Load 260V/20A/2800W
- ★ AN29203(F): AC/DC Electronic Load 260V/30A/4200W
- ★ AN29204(F): AC/DC Electronic Load 260V/40A/5600W
- ★ AN29205(F): AC/DC Electronic Load 260V/50A/7000W
- ★ AN29206(F): AC/DC Electronic Load 260V/60A/8400W
- ★ RS485, GPIB optional

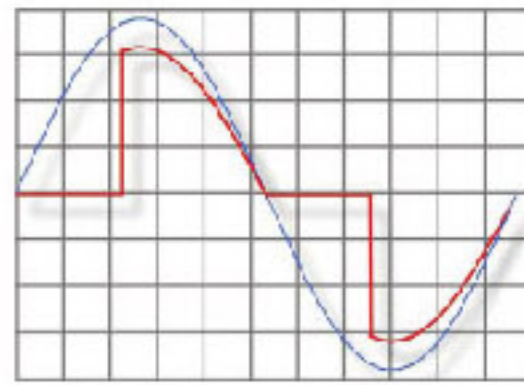


## Production function

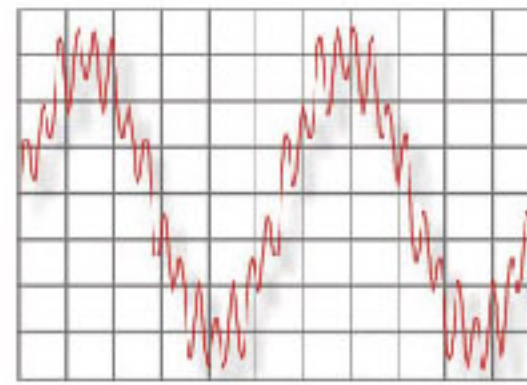
### ★ Waveform simulation



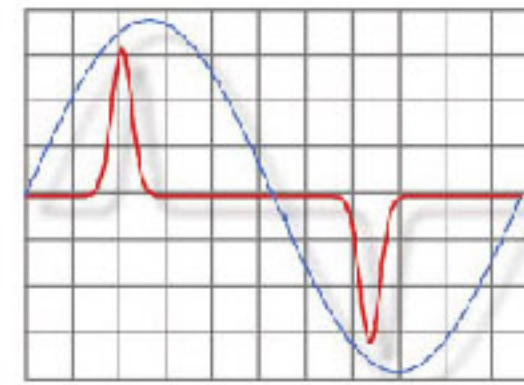
Sine wave mode



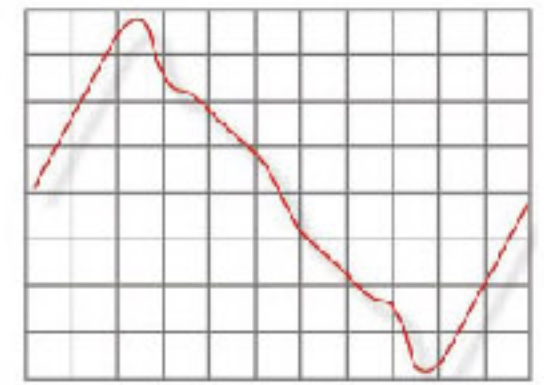
Phase gate mode



Harmonic mode



Crest factor mode

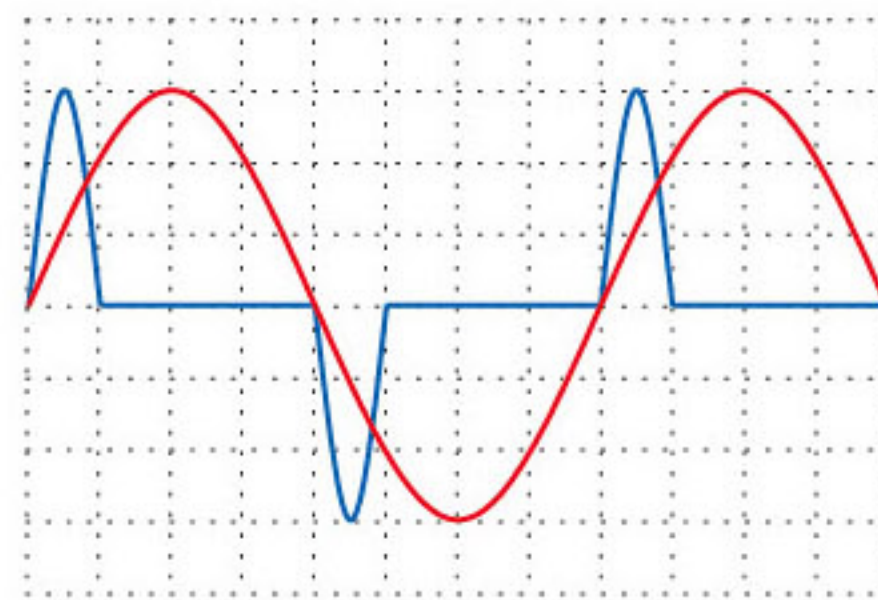


Programmable mode

## Test function

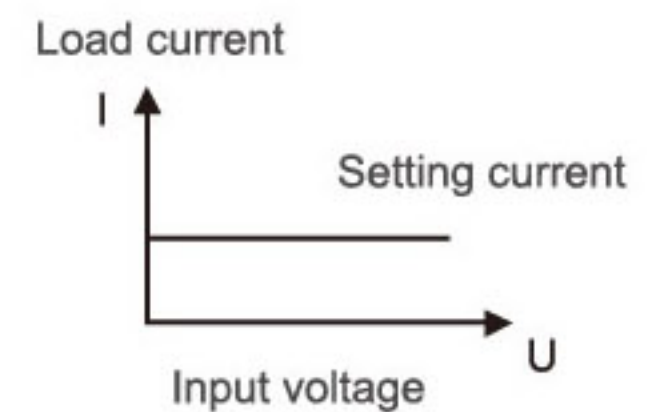
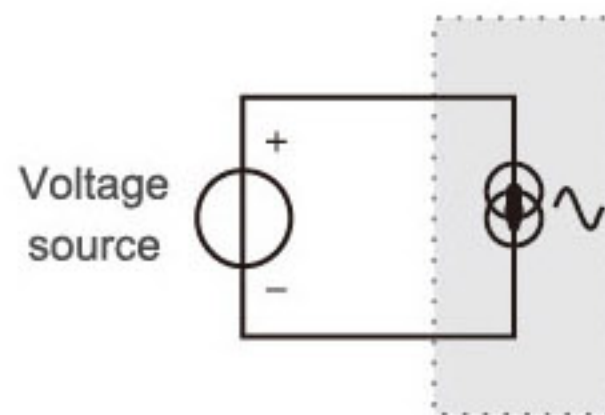
### ★ Power factor test

Simulate inductive and capacitive load, PF is from 0 to 1. If load current phase shift and PF are both need to set, PF can be set on front panel easily, do not need wire connection.



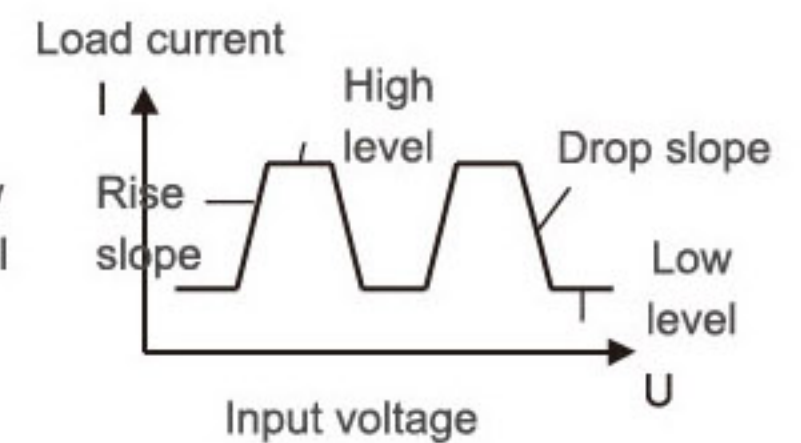
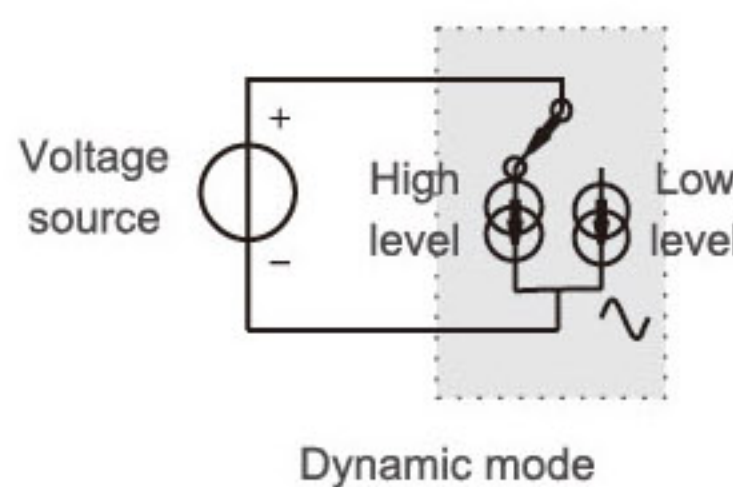
### ★ Regulation test

Under CC mode, load current is just changing setting value, not with DUT output voltage. Please refer to the characteristic curve



### ★ Dynamic performance test

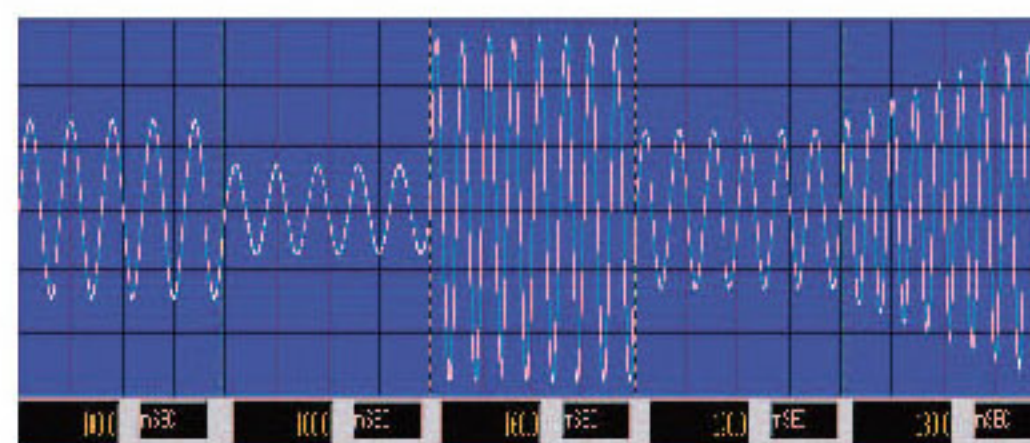
Dynamic mode is switching between 2 levels in cycle, please refer to the characteristic curve. Dynamic current rising/dropping slope can be adjusted separately



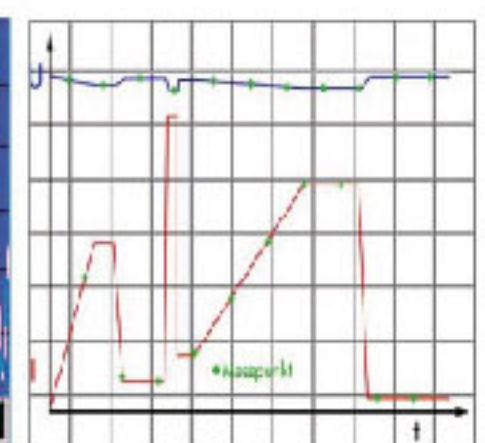
★ 4 groups, 10 steps/group. 4 groups can be parallel into 40 steps, and also can be divided into separated steps

### ★ Connect in parallel and series

3 units in parallel to realize 3 phase load



Programmable steps loading waveform



Programmable DC loading waveform



## Spec.-1

Model		AN29201(F)	AN29202(F)	AN29203(F)	
Power capacity		1400W	2800W	4200W	
Current		0~10Arms (45Apeak)	0~20Arms (90Apeak)	0~30Arms (135Apeak)	
Voltage		2~260Vrms(360Vpeak) Up to 350V(500Vpeak), need to modify(500Vpeak)			
Frequency		44~1000Hz, DC			
AC mode	CC mode	Setting range	0~10Arms programmable	0~20Arms programmable	0~30Arms programmable
		Accuracy	50/60/400Hz:0.1%+0.2%×range		
		Resolution	2mA	5mA	5mA
	CR mode	Setting range	1~1200Ω programmable	1~600Ω programmable	1~400Ω programmable
		Accuracy	50/60Hz:1.5%+0.5%×range 400Hz:1.5%+1.0%×range		
		Resolution	0.2Ω	0.1Ω	0.067Ω
	CP mode	Setting range	1400W programmable	2800W programmable	4200W programmable
		Accuracy	DC/50/60/400Hz:0.2%+0.3%×range		
		Resolution	0.25W	0.5W	0.75W
	Crest setting range		1.4~5.0, programmable		
	Gate trigger mode	Turn on angle	0~359°		
		Turn off angle	1~360°		
	Harmonic mode	Order	1~15		
		Accuracy	0~1		
		Resolution	0.1%		
	Power factor mode	Setting range	0~1 lead or lag, programmable		
		Accuracy	1% ×range		
		Resolution	0.01		
	Rectifying load mode	Frequency	45~70Hz		
		R, L, I mode	Rs, Ls, C, RI		
Inductor parasitic resistance setting range		0~9.999Ω	0~9.999Ω	0~9.999Ω	
L setting range		0~9999μH	0~9999μH	0~9999μH	
C setting range		100-9999μF	100-9999μF	100-9999μF	
R setting range		2.77~9999.99Ω	1.39~9999.99Ω	1.11~9999.99Ω	
DC mode	Voltage range	2~260V	2~260V	2~260V	
	Current range	0~10A	0~20A	0~30A	
	Min working voltage	2V	2V	2V	
	Rising time	1ms			
	Work mode	CC, CR, CP, Dynamic			
	Short circuit simulation	CR			
Meas.	Voltage Meas. range	260.0V	260.0V	260.0V	
	Voltage accuracy	0.1%+0.1%×range	0.1%+0.1%×range	0.1%+0.1%×range	
	Voltage resolution	100mV	100mV	100mV	
	Current Meas. range	10.00A	20.00A	30.00A	
	Current accuracy	0.1%+0.2%×range	0.1%+0.2%×range	0.1%+0.2%×range	
	Current resolution	2.0mA	4.0mA	6.0mA	
	Other parameters	W, AW, VAR, PF, Freq, distortion			
Protection	OCP:10.5Arms OVP:273Vrms OPP:1470W Over heat	OCP:21Arms OVP:273Vrms OPP:2940W Over heat	OCP:31.5Arms OVP:273Vrms OPP:4410W Over heat		
Interface	Standard RS232, optional USB, remote				
Dimension(W×H×D)	440×222×465mm				
Bracket height	15mm				
Input	115/230 Vac±15%				



Spec.-2

Model		AN29204(F)	AN29205(F)	AN29206(F)	
Power capacity		5600W	7000W	8400W	
Current		0~40Arms (180Apeak)	0~50Arms (225Apeak)	0~60Arms (270Apeak)	
Voltage		2~260Vrms(360Vpeak) Up to 350V(500Vpeak), need to modify(500Vpeak)			
Frequency		44~1000Hz, DC			
AC mode	CC mode	Setting range	0~40Arms programmable	0~50Arms programmable	0~60Arms programmable
		Accuracy	DC/50/60/400Hz:0.1%+0.2%×range		
		Resolution	7mA	9mA	10mA
	CR mode	Setting range	1~300Ω programmable	1~240Ω programmable	1~200Ω programmable
		Accuracy	50/60Hz:±1.5%+0.5%×range 400Hz:±1.5%+1.0%×range		
		Resolution	0.05Ω	0.04Ω	0.04Ω
	CP mode	Setting range	5600W programmable	7000W programmable	8400W programmable
		Accuracy	DC/50/60/400Hz:0.2%+0.3%×range		
		Resolution	1W	1.25W	1.5W
	Crest setting range		1.4~5.0, programmable		
	Gate trigger mode	Turn on angle	0~359°		
		Turn off angle	0~360°		
	Harmonic mode	Order	1~15		
		Accuracy	0~1		
		Resolution	0.1%		
	Power factor mode	Setting range	0~1 lead or lag, programmable		
		Accuracy	1% ×range		
		Resolution	0.01		
Rectifying load mode	Frequency	45~70Hz			
	R, L, I mode	Rs, Ls, C, RI			
	Inductor parasitic resistance setting range	0~9.999Ω	0~9.999Ω	0~9.999Ω	
	L setting range	0~9999μH	0~9999μH	0~9999μH	
	C setting range	100-9999μF	100-9999μF	100-9999μF	
	R setting range	1~9999.99Ω	1~9999.99Ω	1~9999.99Ω	
DC mode	Voltage range	2~260V	2~260V	2~260V	
	Current range	0~40A	0~50A	0~60A	
	Min working voltage	2V	2V	2V	
	Rising time	1ms			
	Work mode	CC, CR, CP, Dynamic			
	Short circuit simulation	CR			
Meas.	Voltage Meas. range	260.0V	260.0V	260.0V	
	Voltage accuracy	0.1%+0.1%×range			
	Voltage resolution	100mV	100mV	100mV	
	Current Meas. range	40.00A	50.00A	60.00A	
	Current accuracy	0.1%+0.2%×range			
	Current resolution	8.0mA	10.0mA	12.0mA	
	Other parameters	W, AW, VAR, PF, Freq, distortion			
Protection		OCP:42Arms OVP:273Vrms OPP:2880W Over heat	OCP:52.5Arms OVP:273Vrms OPP:7350W Over heat	OCP:63Arms OVP:273Vrms OPP:8820W Over heat	
Interface		Standard RS232, optional USB, remote			
Dimension(W×H×D)		440×354×465mm			
Bracket height		15mm			
Input		115/230 Vac±15%			