



**ITECH YOUR POWER TESTING SOLUTION**

**POWERFUL TESTING MADE EASY**

THD up to 50th

Oscilloscope Function

Parallel/ 3-Phase Control

Adjustable CF/PF

Multiple Parameters Simultaneously Displayed



**IT8615**

**AC/DC ELECTRONIC LOAD**



ITECH Electronics Co.,Ltd



# IT8615 AC/DC ELECTRONIC LOAD

IT8615 is our latest AC/DC electronic load. At 3U height, it's very compact for the 420V/20A/1800W input capability. AC Frequency is adjustable from 45Hz to 450Hz. The unique oscilloscope display function provides insight into the voltage and current input waveform. It is equipped with measurement modes for different parameters such as inrush current, peak value, effective value, PF (power factor). Also voltage harmonics of as high as 50th order can be measured directly. All in all the IT8615 provides very comprehensive analysis of your DUT performance. The product is equipped with standard RS232, GPIB, LAN and USB communication interfaces for reliable and fast control. The eLoad is the perfect solution for testing UPS, inverters, AC power supplies and relevant AC electronic components.

## Features

- Input : 50~420Vrms, 0~20Arms and 1800W
- Frequency range: 45~100Hz
- 3U Height, 1800W and 7"LCD screen
- Parallel connection/three-phase control
- Oscilloscope function supporting display of voltage and current waveform
- Be able to measure Vrms, Vpk, Vdc, Irms, Ipk, Idc, W, VA, VAR, CF, PF and FREQ
- Measures THD (V) up to 50th Harmonic
- AC electronic load: CC /CR/CP mode
- DC electronic load: CC/CR/CP/CV mode
- External 0-10V analog control input, voltage and current analog monitoring function
- OTP, OCP, OVP, UVP and OPP protection function
- RS232, GPIB, LAN and USB communication interfaces and external USB flash disk interface

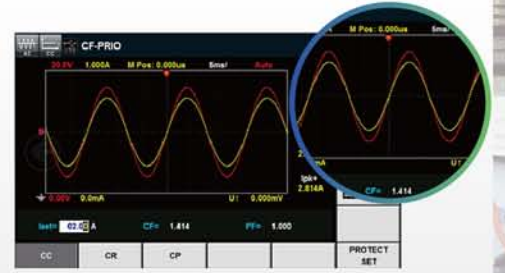
## Harmonic Measuring And Analysis Function

IT8615 provides powerful data measurement function, which can not only support measurement of conventional parameters such as Vrms, Vpk, Vdc, Irms, Ipk, Idc, W, VA, VAR, CF, PF and Freq, but also provides a unique voltage harmonic analysis function to verify the harmonic interference of the object (uninterruptible power supply, generators, etc.) to be measured over the grid. The harmonic measurement function supports analysis up to the 50th voltage harmonic.



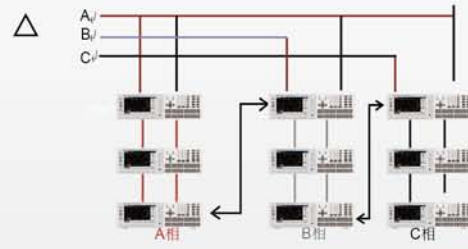
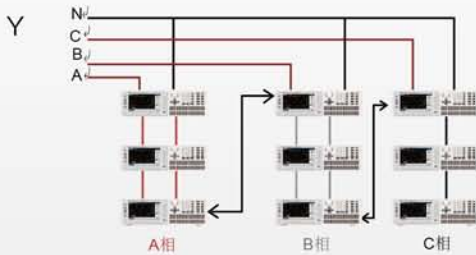
## Oscilloscope Function

The most unique highlight of IT8615 lies in the oscilloscope display function, which can display the input voltage and current waveform of the device under test measured. Under the harmonic measurement mode, the analysis result of the percentage of different harmonics can be displayed in the bar diagram. The innovative display mode provides a powerful new user experience.



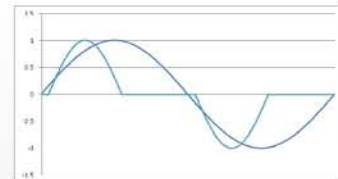
## Parallel/3-Phase Control

IT8615 provides parallel and 3-phase functions for three-phase and high-power applications. In 3-phase applications, users can make Y or  $\Delta$  connection according to their specific requirements. IT8615 is available for AC 380V input to meet diverse test requirements.

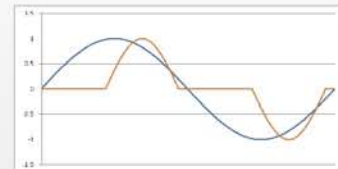


## Adjustable CF/PF Value

IT8615 has CC, CR and CP operation modes. In CC and CP operation modes, PF or CF or both are available for programming. Power factor range is 0~1 lead or lag, CF setting range is 1.414~5, besides CF and PF, IT8615 also has various settings modes for choice to realize actual current simulation.



CF=2  
PF=0.68



CF=2  
PF=-0.68

## Display Multiple Parameters Simultaneously

IT8615 provides 7inch LCD display screen, easy user interface. Give full consideration to engineers' requirements in different tests, IT8615 not only can display multiple parameters simultaneously, but also has diversified display modes for choice, such as waveform, histogram and list etc.



## Applications

- Uninterruptible Power Supplies (UPS)
- Inverters
- Frequency Transformer
- Generator
- AC Power Source
- Electronic Components



# IT8615 AC/DC ELECTRONIC LOAD

AC Section		
Input Parameters	Input voltage	50~420Vrms, 600V peak
	Input current	0~20Arms, 60A peak
	Input power	0~1800W
	Frequency	45~450Hz
CC mode	Range	0.1~20Arms
	Resolution	2mA
	Accuracy	±(0.1%+0.2%FS)
CR mode *1	Range	3Ω~2.5KΩ
	Resolution	16bit
	Accuracy	0.2% +0.01S
CP mode	Range	1800W
	Resolution	0.4W
	Accuracy	0.5%+0.5%FS
Crest Factor(CF) (CP,CC mode)	Range	1.414~5.0
	Resolution	0.005
	Accuracy	(0.5% / Irms) + 1% F.S.
Power Factor(PF)	Range	0~1 lead or lag
	Resolution	0.001
DC Section		
Rating value	Input voltage	10~600V
	Input current	0.1~20A
	Input power	0~1800W
Working mode	CC,CV,CP,CR	
Short circuit simulation	The max power point or max current in CC mode	
Meter		
Current	Range	0~60A
	Resolution	1mA
	Accuracy	0.1%+0.2%FS+0.1%*CF^2*KHZ
Voltage	Range	0~600V
	Resolution	10mV
	Accuracy	0.1% +0.1%FS
Meter(continue)		
Others	S(VA),Q(VAR),P(W),Ip+,Ip-,Freq,THDv,CF,PF,R,FFT	
Other		
Vmonitor	±600v±10V(Isolated)	
Imonitor	±60A±10V(Isolated)	
Protection	OCP:21Arms,OVP:430Vrms,OPP:1900W,OTP:85℃	
Remote Interface	GPIB, USB, LAN	
Dimension(H*W*D)	482.5 mm x 133mm x 600.6mm	
Weight	25Kg	
Power Supply	Voltage	100~240V AC
	Frequency	47~63 Hz
	Operation Current	<2.5A(110V), <1.25A(220V)

1.Input Voltage/Current ≥10%FS

2.Resistance Readback Range: ( 1/(1/R+(1/R)\*0.01%+0.08),1/(1/R-(1/R)\*0.01%-0.08) )

3.Rising/Falling Slope:Between 0 and maximum current,R/F slope is 10%~90% Current rising slope.