



# 3330F Series

## Dual DC Electronic Load

### FEATURES

- 5 digital V / A/ W Meter.
- Isolated two loads unit within one module.
- Large LCD Display \ setting values can be adjusted by rotary knob or push button.
- 2 sets V. A. W. values can be displayed simultaneously.
- OCP \ OPP test function.
- Must be configured in 3302G (Single Slot Mainframe), 3305G (Two Slot Mainframe) or 3300G (Four Slot Mainframe) and the mainframe with 150 sets Store / Recall memory.
- Power ON status value can be set.
- Flexible CC, CR, CV, CP, Dynamic and Short operation modes.
- SHORT time setting and SHORT\_VH, SHORT\_VL setting function.
- Protections against V, I, W, and °C.
- Voltage meter display the polarity positive ( " + " ) or negative ( " - " ) is selectable.
- SYNC. Load ON function.

# 3330F Series Dual DC Electronic Load

**3330F** 80 V, 60 A, 250 W & 80 V, 6 A, 50 W

**3332F** 80 V, 24 A, 120 W \*2

**3336F** 80 V, 3 A, 40 W \*2

**3337F** 80 V, 30 A, 150 W\*2



## Features

- 5 digital V / A/ W Meter.
- Isolated two loads unit within one module.
- Large LCD Display 、 setting values can be adjusted by rotary knob or push button.
- 2 sets V. A. W. values can be displayed simultaneously.
- OCP 、 OPP test function.
- Must be configured in 3302G (Single Slot Mainframe), 3305G (Two Slot Mainframe) or 3300G (Four Slot Mainframe) and the mainframe with 150 sets Store / Recall memory.
- Power ON status value can be set.
- Flexible CC. CR, CV, CP, Dynamic and Short operation modes.
- SHORT time setting and SHORT\_VH, SHORT\_VL setting function.
- Protections against V, I, W, and °C.
- Voltage meter display the polarity positive ( " + " ) or negative ( " - " ) is selectable.
- SYNC. Load ON function.
- Optional Interface : GPIB 、 RS232 、 USB 、 LAN

## Descriptions

- 3330F Series Dual DC Electronic Load is a two load unit in one module. Each 3330F Series module has its own control and display panel, CC/CR/CV/CP/ Dynamic modes, plug in 3300G with 150 sets Store/Recall memory which provides load set-up more efficiently , also can be remote controlled via RS232 、 Ethernet 、 USB and GPIB interface.
- SHORT time setting and SHORT\_VH, SHORT\_VL setting function , also can measure Short Voltage and Current.
- Dynamic can be simulated under CC, CP mode. The current Rise/Fall slew rate can be adjusted individually.
- The additional OCP 、 OPP test function will be more efficiency and accuracy on OCP, OPP testing.
- Programmable Load ON/OFF voltage, GO/NG meter check, Voltage meter display " + " or " - " is selectable and 150 sets Store / Recall larger memory is much advance features for each different application.
- 150 sets test parameter and status storage function can call the storage memory real time in accordance with the auto sequence requirement.

## Applications

- Voltage / Current source
- SMPS transient response
- Current limit testing and battery emulation
- Battery charger
- Battery discharge
- R&D, Quality Control
- ATE system
- Production testing

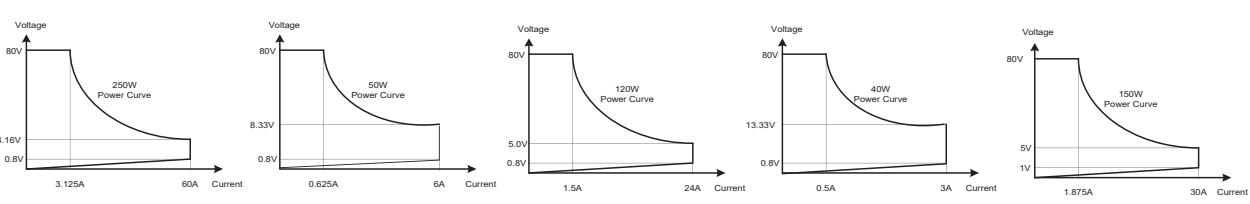
## SPECIFICATIONS

Model	3330F		3332F		3336F		3337F	
Power	250W	50W		120Wx2		40Wx2		150Wx2
Current	0~60A	0~6A	0~24A	0~24A	0~3A	0~3A	0~30A	0~30A
Voltage	0~80V	0~80V	0~80V	0~80V	0~80V	0~80V	0~80V	0~80V
Min. Operating Voltage	0.8V @ 60A	0.8V @ 6A	0.8V @ 24A	0.8V @ 24A	0.4V @ 3A	0.4V @ 3A	1V @ 30A	1V @ 30A
<b>Constant Current Mode</b>								
Range <sup>1</sup>	0~6A/60A	0~0.6A/6A	0~2.4A/24A	0~2.4A/24A	0~0.3A/3A	0~0.3A/3A	0~3A/30A	0~3A/30A
Resolution	0.1mA/1mA	0.01mA/0.1mA		0.04mA/0.4mA		0.005mA/0.05mA		0.05mA/0.5mA
Accuracy	± 0.1% (Setting + Range)		± 0.1% (Setting + Range)		± 0.1% (Setting + Range)		± 0.1% (Setting + Range)	
<b>Constant Resistance Mode</b>								
Range	0.01335~1.335~80.1kΩ	0.1335~13.35~801kΩ	0.0333~3.33~199.8kΩ	0.0333~3.33~199.8kΩ	0.267~26.7~1602kΩ	0.267~26.7~1602kΩ	0.0443~2.66~159.6kΩ	0.0443~2.66~159.6kΩ
Resolution	22.25μΩ/12.484μS	222.5μΩ/1.2484μS		55.55μΩ/5μS		445μΩ/0.6242μS		44.33μΩ/0.265μS
Accuracy	0.2% OF (Setting + Range)		0.2% OF (Setting + Range)		0.2% OF (Setting + Range)		0.2% OF (Setting + Range)	
<b>Constant Voltage Mode</b>								
Range	6V/80V	6V/80V	6V/80V	6V/80V	6V/80V	6V/80V	6V/80V	6V/80V
Resolution	0.135mV/1.35mV		0.135mV/1.35mV		0.135mV/1.35mV		0.135mV/1.35mV	
Accuracy	± 0.05% (Setting + Range)		± 0.05% (Setting + Range)		± 0.05% (Setting + Range)		± 0.05% (Setting + Range)	
<b>Constant Power Mode</b>								
Range	25W(I <sub>max</sub> =6A)/250W	5W(I <sub>max</sub> =0.6A)/50W	12W(I <sub>max</sub> =2.4A)/120W	12W(I <sub>max</sub> =2.4A)/120W	4W(I <sub>max</sub> =0.3A)/40W	4W(I <sub>max</sub> =0.3A)/40W	15W(I <sub>max</sub> =3A)/150W	15W(I <sub>max</sub> =3A)/150W
Resolution	0.417mW/4.17mW	0.084mW/0.84mW	0.2mW/2mW	0.2mW/2mW	0.067mW/0.67mW	0.067mW/0.67mW	0.067mW/0.67mW	0.067mW/0.67mW
Accuracy	± 0.5% (Setting + Range)		± 0.5% (Setting + Range)		± 0.5% (Setting + Range)		± 0.5% (Setting + Range)	
<b>Dynamic Mode -CC</b>								
<b>Timing</b>								
Thigh & Tlow	0.050~9.999 / 99.99 / 999.9 / 9999mS		0.050~9.999 / 99.99 / 999.9 / 9999mS		0.050~9.999 / 99.99 / 999.9 / 9999mS		0.050~9.999 / 99.99 / 999.9 / 9999mS	
Resolution	0.001 / 0.01 / 0.1 / 1mS		0.001 / 0.01 / 0.1 / 1mS		0.001 / 0.01 / 0.1 / 1mS		0.001 / 0.01 / 0.1 / 1mS	
Accuracy	1μs/10μs/100μs/1ms + 50ppm		1μs/10μs/100μs/1ms + 50ppm		1μs/10μs/100μs/1ms + 50ppm		1μs/10μs/100μs/1ms + 50ppm	
Slew rate	4mA~250mA/uS	0.4mA~25mA/uS	1.6mA~100mA/uS	1.6mA~100mA/uS	0.2mA~12.5mA/uS	0.2mA~12.5mA/uS	2mA~125mA/uS	2mA~125mA/uS
	40mA~2500mA/uS	4mA~250mA/uS	16mA~1000mA/uS	16mA~1000mA/uS	2mA~125mA/uS	2mA~125mA/uS	20mA~1250mA/uS	20mA~1250mA/uS
Resolution	1mA/10mA	0.1mA/1mA		0.4mA/4mA		0.05mA/0.5mA		0.5mA/5mA
Accuracy	(5% of setting) ± 10 μs							
Min. Rise Time	24uS(typical)		24uS(typical)		24uS(typical)		24uS(typical)	
<b>Current</b>								
Range	6/60A	0.6A/6A	2.4/24A	2.4/24A	0.3/3A	0.3A/3A	3/30A	3A/30A
Resolution	0.1mA/1mA	0.01mA/0.1mA		0.04mA/0.4mA		0.005mA/0.05mA		0.05mA/0.5mA
Accuracy	± 0.1% (Setting + Range)		± 0.1% (Setting + Range)		± 0.1% (Setting + Range)		± 0.1% (Setting + Range)	
<b>Measurement</b>								
<b>Voltage Read Back</b>								
Range (5 Digital)	0~6V/81V	0~6V/81V	0~6V/81V	0~6V/81V	0~6V/81V	0~6V/81V	0~6V/81V	0~6V/81V
Resolution	0.1mV/1.35mV		0.1mV/1.35mV		0.1mV/1.35mV		0.1mV/1.35mV	
Accuracy	± 0.025% (Reading + Range)		± 0.025% (Reading + Range)		± 0.025% (Reading + Range)		± 0.025% (Reading + Range)	
<b>Current Read Back</b>								
Range (5 Digital)	0~6A/60A	0~0.6A/6A	0~2.4A/24A	0~2.4A/24A	0~0.3A/3A	0~0.3A/3A	0~3A/30A	0~3A/30A
Resolution	0.1mA/1mA	0.01mA/0.1mA		0.04mA/0.4mA		0.005mA/0.05mA		0.05mA/0.5mA
Accuracy	± 0.1% (Reading + Range)		± 0.1% (Reading + Range)		± 0.1% (Reading + Range)		± 0.1% (Reading + Range)	
<b>Power Read Back</b>								
Range (5 Digital)	0~250W	0~50W	0~120W	0~120W	0~40W	0~40W	0~150W	0~150W
Accuracy	± 0.125% (Reading + Range)		± 0.125% (Reading + Range)		± 0.125% (Reading + Range)		± 0.125% (Reading + Range)	
<b>Program mode(Mainframe)</b>								
Sequence No.	F1~9/16 Steps							
T1/T2 (Dwell)	0.1S~9.9S/Repeat 9999							
GO/NG Check	Voltage/Current/Power							
<b>Protections</b>								
Over Power	105% of Rated Power		105% of Rated Power		105% of Rated Power		105% of Rated Power	
Over Current	105% of Rated Current		105% of Rated Current		105% of Rated Current		105% of Rated Current	
Over Voltage	105% of Rated Voltage		105% of Rated Voltage		105% of Rated Voltage		105% of Rated Voltage	
Over Temp.	-90°C		-90°C		-90°C		-90°C	
Reverse polarity	No		No		No		No	
<b>Interface(Mainframe)</b>								
RS-232	Optional		Optional		Optional		Optional	
GPIOB	Optional		Optional		Optional		Optional	
USB	Optional		Optional		Optional		Optional	
Ethernet	Optional		Optional		Optional		Optional	
Remote Controller	Optional		Optional		Optional		Optional	
<b>Others</b>								
<b>Load ON Voltage</b>								
Range	0.1~25.0V							
Resolution	0.1V							
Accuracy	1% of Setting + 0.25V							
<b>Load OFF Voltage</b>								
Range	0~25V							
Resolution	0.1mV/1.35mV							
Temperature Coefficient	100ppm/°C(typical)		100ppm/°C(typical)		100ppm/°C(typical)		100ppm/°C(typical)	
Power	Supply from Mainframe		Supply from Mainframe		Supply from Mainframe		Supply from Mainframe	
Operating Temperature <sup>3</sup>	0~40°C		0~40°C		0~40°C		0~40°C	
Dimension(HxWxD)	143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch	
Weight	3.5 kg / 7.7 lbs		3.5 kg / 7.7 lbs		3.5 kg / 7.7 lbs		3.5 kg / 7.7 lbs	
Safety & EMC	CE		CE		CE		CE	
Dimension(HxWxD)	143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch		143 x 108 x 405 mm/5.6x4.3x15.9 inch	
Safety & EMC	CE		CE		CE		CE	

Note <sup>1</sup> : The range is automatically forcing to range II only in CC mode

Note <sup>2</sup> : Power F.S. = Vrange F.S. x Irange F.S.

Note <sup>3</sup> : Operating temperature range is 0~40°C, All specifications apply for 25°C±5°C



Global Headquarters  
**GOOD WILL INSTRUMENT CO., LTD.**  
No.7-1, Jhongsing Road, Tucheng Dist., New Taipei City 236, Taiwan  
T +886-2-2268-0389 F +886-2-2268-0639  
E-mail: [marketing@goodwill.com.tw](mailto:marketing@goodwill.com.tw)

China Subsidiary  
**GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.**  
No. 521, Zhuijiang Road, Snd, Suzhou Jiangsu 215011 China  
T +86-512-6661-7177 F +86-512-6661-7277

Malaysia Subsidiary  
**GOOD WILL INSTRUMENT (SEA) SDN. BHD.**  
No. 1-3-18, Elit Avenue, Jalan Mayang Pasir 3,  
11950 Bayan Baru, Penang, Malaysia  
T +604-6111122 F +604-6115225

Europe Subsidiary  
**GOOD WILL INSTRUMENT EURO B.V.**  
De Run 5427A, 5504DG Veldhoven, THE NETHERLANDS  
T +31(0)40-2557790 F +31(0)40-2541194

U.S.A. Subsidiary  
**INSTEK AMERICA CORP.**  
5198 Brooks Street Montclair, CA 91763, U.S.A.  
T +1-909-399-3535 F +1-909-399-0819

Japan Subsidiary  
**TEXIO TECHNOLOGY CORPORATION.**

7F Towa Fudosan Shin Yokohama Bldg., 2-18-13 Shin  
Yokohama, Kohoku-ku, Yokohama, Kanagawa,  
222-0033 Japan  
T +81-45-620-2305 F +81-45-534-7181

Korea Subsidiary  
**GOOD WILL INSTRUMENT KOREA CO., LTD.**  
Room No.503, Gyeonginro 775 (Mullae-Dong 3Ga,  
Ae Hightech-City B/D 1Dong), Yeongdeungpo-Gu,  
Seoul 150093, Korea  
T +82-2-3439-2205 F +82-2-3439-2207

India Subsidiary  
**GW INSTEK INDIA LLP.**  
2F, No. 20/1, Salarpuria Galleria Building, Bellary Road,  
Kashi Nagar, Byatarayanapura, Bangalore, Karnataka 560092 India  
T +91-80-4203-3235

**GW INSTEK**  
Simply Reliable



Website



Facebook



LinkedIn