



33430G Series

High Power LED DC Electronic Load Simulator

FEATURES

- LED mode load for LED Power Driver test.
- CC, CR, CV, CP, LED and Dynamic mode.
- Simulate LED Forward Bias Voltage (Vd) and Resistance (Rd).
- Not only CC, CR, and CP mode have parallel operation functions, but CV mode also has parallel operation functions.
- Fast Response for PWM dimming test.
- Built-in dimming control signal for PWM dimming test.
- Short circuit test by external relay (built-in short relay driver circuit).
- 5 digital V / A / W Meter.
- Protections against V, I, W, and °C.
- 150 sets Store / Recall memory.

33430G Series

High Power LED DC Electronic Load Simulator



Features

- LED mode load for LED Power Driver test.
- CC, CR, CV, CP, LED and Dynamic mode.
- Simulate LED Forward Bias Voltage (Vd) and Resistance (Rd).
- Not only CC, CR, and CP mode have parallel operation functions, but CV mode also has parallel operation functions.
- Fast Response for PWM dimming test.
- Built-in dimming control signal for PWM dimming test.
- Short circuit test by external relay (built-in short relay driver circuit).
- 5 digital V / A / W Meter.
- Protections against V, I, W, and °C.
- Can be configured in the Mainframe of 3302G [Single Solt Mainframe] 、 3305G [Two Solt Mainframe] or 3300G [Four Solt Mainframe] ， each mainframe has up to 150 sets Store/Recall memory.
- Voltage can be increased to 600V (option)
- Optional Interface : GPIB 、 RS232 、 USB 、 LAN.
- The power input dimming frequency of 3345G & 33402G is up to 25KHZ that is the fastest and widest of bandwidth electronic load in the market.
- The dimming control output of 3345G & 33402G is DC-10KHZ

Descriptions

- Each 3340G Series module has its own control and display panel, LED/CC/CR/ CV/CP/ Dynamic modes, plug in 3300F with 150 sets Store/Recall memory which provides load set-up more efficiently , also can be controlled intranet via RS232 、 Ethernet 、 USB and GPIB interface.
- Short circuit test by external relay (there is an optional fixture for short), Short Time can be set and Short Voltage can be measured.
- Built-in dimming control signal output is for PWM dimming test.
- Simulate LED forward Bias voltage (Vd) and Resistance (Rd).
- 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 feature 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

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

SPECIFICATIONS

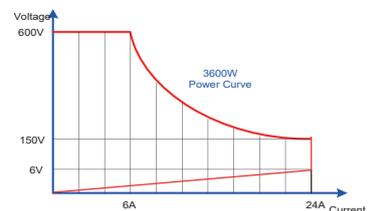
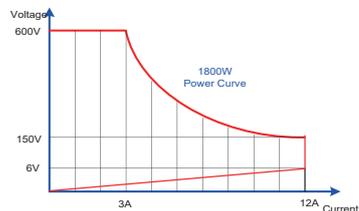
Model	33431G	33432G
Power	1800 W	3600 W
Current	0 A to 12 A	0 A to 24 A
Voltage	0 V to 600 V	0 V to 600 V
Min. Operating Voltage	6 V @ 12 A	6 V @ 24 A
Constant Current Mode		
Range ^{*1}	0 A to 3 A/12 A	0 A to 6 A/24 A
Resolution	0.05 mA/0.2 mA	0.1 mA/0.4 mA
Accuracy	± 0.1 % OF (Setting + Range)	
Constant Resistance Mode		
Range	CRL: 0.5 Ω to 1.5 KΩ(300 V) / CRH:1 Ω to 3 KΩ(600 V)	CRL: 0.25 Ω to 3 KΩ(300 V) / CRH: 0.5 Ω to 6 KΩ(600 V)
Resolution ^{*3}	CRL: 3.333 μS / CRH:1.666 μS	CRL: 6.666 μS / CRH: 3.333 μS
Accuracy	± 0.2 % OF (Setting + Range)	
Constant Voltage Mode		
Range	60 V/300 V/600 V	60 V/300 V/600 V
Resolution	0.001 V/0.005 V/0.01 V	0.001 V/0.005 V/0.01 V
Accuracy	± 0.05 % OF (Setting +Range)	
Constant Power Mode		
Range	1800 W	3600 W
Resolution	30 mW	60 mW
Accuracy	± 0.5 % OF (Setting + Range)	
LED Mode		
Vo Voltage Range	LEDL:60 V / LEDM:300 V / LEDH:600 V	LEDL:60 V / LEDM:300 V / LEDH:600 V
Rd Resistance Range	LEDL : 0.5 Ω to 100 Ω @ Vo-Vd = 0 V to 6 V LEDL : 5 Ω to 1 KΩ @ Vo-Vd = 6 V to 60 V LEDM: 2.5 Ω to 500 Ω @ Vo-Vd = 0 V to 30 V LEDM: 25 Ω to 5 KΩ @ Vo-Vd = 30 V to 300 V LEDH: 5 Ω to 1 KΩ @ Vo-Vd = 0 V to 60 V LEDH: 50 Ω to 10 KΩ @ Vo-Vd = 60 V to 600 V	LEDL : 0.25 Ω to 125 Ω @ Vo-Vd = 0 V to 6 V LEDL : 2.5 Ω to 1.25 KΩ @ Vo-Vd = 6 V to 60 V LEDM: 1.25 Ω to 625 Ω @ Vo-Vd = 0 V to 30 V LEDM: 12.5 Ω to 6.25 KΩ @ Vo-Vd = 30 V to 300 V LEDH: 2.5 Ω to 1.25 KΩ @ Vo-Vd = 0 V to 60 V LEDH: 25 Ω to 12.5 KΩ @ Vo-Vd = 60 V to 600 V
Resolution	16 Bits	
Accuracy	Vd : ± (0.05 % OF SETTING + 0.1 % OF RANGE), Rd : ± (0.05 % OF SETTING + 0.1 % OF RANGE)	
Dynamic Mode - CC		
Timing		
Thigh & Tlow	0.050 ms to 9.999 ms/ 99.99 ms/ 999.9 ms/ 9999 ms	
Resolution	0.001 ms/ 0.01 ms/ 0.1 ms/ 1 ms	
Accuracy	1 μs/10 μs/100 μs/1 ms + 50 ppm	
Slew rate	2.4 mA/μs to 150 mA/μs, 9.6 mA /μs to 600 mA/μs	4.8 mA/μs to 300 mA/μs, 19.2 mA/μs to 1200 mA/μs
Resolution	0.6 mA/μs, 2.4 mA/μs	1.2 mA/μs, 4.8 mA/μs
Min. Rise Time	20 μs (typical)	20 μs (typical)
Current		
Range ^{*2}	0 A to 3 A/12 A	0 A to 6 A/24 A
Resolution	0.05 mA/0.2 mA	0.1 mA/0.4 mA
Measurement		
Voltage Read Back		
Range (5 Digital)	60 V/300 V/600 V	60 V/300 V/600 V
Resolution	1 mV/5 mV/10 mV	1 mV/5 mV/10 mV
Accuracy	± 0.025 % OF (Reading + Range)	
Current Read Back		
Range (5 Digital)	0 A to 3 A/12 A	0 A to 6 A/24 A
Resolution	0.05 mA/0.2 mA	0.1 mA/0.4 mA
Accuracy	± 0.1 % OF (Reading + Range)	
Power Read Back		
Range (5 Digital)	0 W to 1800 W	0 W to 3600 W
Resolution	0.01 W	
Accuracy	± 0.125 % OF (Reading + Range)	
Program mode(Mainframe)		
Sequence No.	F1 to F9/16 Steps	
T1/T2 (Dwell)	0.1 sec. to 9.9 sec./Repeat 9999	
Load Setting(External Programming)	0 V to 10 V for CC mode F.S.	
GO/NG Check	Voltage/Current/Power	

Protections		
Over Power	105 % of Rated Power	
Over Current	105 % of Rated Current	
Over Voltage	105 % of Rated Voltage	
Over Temp.	Yes	
Interface		
RS-232	Optional	
GPIB	Optional	
USB	Optional	
Ethernet	Optional	
Others		
Load ON Voltage		
Range	0.4 V to 100.0 V	0.4 V to 100.0 V
Resolution	0.4 V	0.4 V
Accuracy	1 % of Setting + 0.25 V	
Load OFF Voltage		
Range	0.4 V to 100.0 V	0.4 V to 100.0 V
Resolution	Same as Voltage Meter	
Accuracy	Same as Voltage Meter	
General		
Imonitor	1.2 A/V	2.4 A/V
Accuracy	± 0.5 % of (READING+RANGE)	
short Single Output	12 V/100 mA	12 V/100 mA
Short Circuit		
Current	12 A	24 A
Dimming Control		
Level Range	0 V to 12 V	
Resolution	0.048 V	
Accuracy	1 % of (SETTING + RANGE)	
Frequency Range	DC to 1 KHz	
Resolution	10 Hz	
Duty Range	0.01 to 0.99(1 % to 99 %)	
Resolution	0.01	
Temperature Coefficient	100 ppm/°C(typical)	
Power	100 Wmax	200 Wmax
Operating Temperature ^{*2}	0 °C to 40 °C	
Dimension(HxWxD)	177 mm x 440 mm x 445 mm	889 mm x 596 mm x 600 mm
Weight	23.6 Kg	81.2 kg
Safety & EMC	CE	

Note ^{*1} : The range is automatically or forcing to range II only in CC mode

Note ^{*2} : Operating temperature range is 0~40°C, All specifications apply for 25°C±5°C

Note ^{*3} : μS (microsiemens) is the unit of conductance(G), one siemens equal to 1/Ω



All specifications are subject to change without notice.

Order Information

33431G	High Power LED DC Electronic Load Simulator	600V / 12A / 1800W
33432G	High Power LED DC Electronic Load Simulator	00V / 24A / 3600W

33431G



33432G



(Desktop)

Option :
Fixture for short



GPIB+RS232 interface



RS232 interface



GPIB interface



USB interface



LAN interface



OPTIONAL ACCESSORIES

GPIB+RS232 interface	Fixture for short
RS232 interface	GPIB cable length 1 m
GPIB interface	GPIB cable length 2 m
USB interface	USB TYPE A to TYPE B cable length 1.8 m
LAN interface	

Note: * Regarding the product delivery date, please contact your regional sales representative.

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

China Subsidiary

GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.

No. 521, Zhujiang 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,
Ace Hightech-City B/D 1Dong), Yeongduengpo-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