

	Normal mode	Turbo mode
3317G / 3317G-M	80V / 160A / 800W	80V / 320A / 1600W
3319G / 3319G-M	500V / 40A / 800W	500V / 80A / 1600W



Features

- 5 digital V / A / W Meter can be displayed on Large LCD display simultaneously.
- Flexible CC, CR, CV, CP, CC + CV, CP + CV, Dynamic and short circuit operation modes.
- Built-in test modes include Battery Discharge, BMS, Fuse/Breaker Trip/Non-Trip, Short circuit, OCP, OPP test modes.
- Turbo mode can withstand up to 4 times the current and power electronic load within 1 sec. period, most fit Fuse/Breaker and BMS, Short circuit, OCP, OPP test.
- Provide battery BMS protection test function.
- Support MPPT CC, CR, CV test function for solar panel.
- Short circuit duration can be set within short circuit test.
- Can set the power-on status value.
- Voltage meter display can be configured as polarity positive ("+") or negative ("-").
- Optional programmable NTC Resistor (installed in mainframe)
- Optional Interface: GPIB, RS232, USB, LAN.
- Protection against V, I, W, and °C.
- Optional 9923 load current waveform generator to provide the battery actual discharge current waveform simulation.

Descriptions

- 3317G / 3317G-M / 3319G / 3319G-M has its own control and display panel, CC / CR / CV / CP / Dynamic modes, with 150 sets Store/Recall memory which provides load set-up more efficiently, also can be controlled via RS232, Ethernet, USB and GPIB interface.
- The new Turbo mode is designed for overload or protection testing, which includes OCP, OPP, Short for AC / DC or DC/DC power source; Over Charge / Discharge and Short for Battery BMS protection; and Blow/Not Blow testing for Fuse, Breaker or PTC Current Protection Components.
- Support Short, OCCP and OCDP protection tests for battery BMS protection testing, the peak current before protection and protection response time are measured.
- BMS, Fuse, OCP and OPP single-key test functions make test more efficient.
- Dynamic can be simulated under CC, CP mode. The current Rise / Fall slew rate can be adjusted individually and there is an external signal input so that load can have a simulated Specific Load Current Waveform, optional 9923 Load Current Waveform Generator is able to support real current waveform testing.
- SHORT duration setting and SHORT_VH, SHORT_VL setting function, also can measure Short Voltage and Current.
- 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, at any time to tune out the stored memory for use.

Applications

- Voltage / Current source SMPS transient response
- Voltage Source Current limit testing and battery emulation for Charger testing
- Battery discharge capacity
- Lithium battery BMS charge and discharge protection
- Fuse, Breaker, PTC specification test
- MPPT test function for solar panels
- R&D, Quality Control
- ATE system
- Production testing

Specifications

MODEL	3317G / 3317G-M		3319G / 3319G-M	
Power	800W, 1600W max. ^{*1}		800W, 1600W max. ^{*1}	
Current	160A / 320A max. ^{*1}		40A / 80A max. ^{*1}	
Voltage	80V		500V	
PROTECTIONS				
Over Power Protection(OPP)			105%	
Over Current Protection(OCP)			105%	
Over Voltage Protection(OVP)			105%	
Over Temp Protection(OTP)			YES	
Constant Current Mode				
Range ^{*2}	0 ~ 16.02A	0 ~ 160.2A	0 ~ 4.02A	0 ~ 40.2A
Resolution	0.267mA	26.7mA	0.067mA	0.67mA
Accuracy	± 0.1% of (setting + Range)			
Constant Resistance Mode				
Range	0.5Ω ~ 30KΩ	0.00416Ω ~ 0.5Ω	15Ω ~ 900KΩ	0.15Ω ~ 15Ω
Resolution	0.0166mS	0.0083mΩ	0.00111mS	0.25mΩ
Accuracy	± 0.2% of (Setting + Range)			
Constant Voltage Mode				
Range	0 ~ 8.04V	0 ~ 80.4V	0 ~ 60V	0 ~ 500V
Resolution	0.000134V	0.00134V	0.001V	0.01V
Accuracy	± 0.05% of (Setting + Range)			
Constant Power Mode				
Range	0 ~ 80.04W	0 ~ 800.4W	0 ~ 80.04W	0 ~ 800.4W
Resolution	1.334mW	13.34mW	1.334mW	13.34mW
Accuracy	± 0.5% of (Setting + Range)			
Constant Current + Constant Voltage Mode				
Range	80V	160A	500V	40A
Resolution	0.00134V	2.67mA	0.01V	0.67mA
Accuracy	± 1.0% of (Setting + Range)			
Constant Power + Constant Voltage Mode				
Range	80V	800W	500V	800W
Resolution	0.00134V	13.34mW	0.01V	13.34mW
Accuracy	± 1.0% of (Setting + Range)			
Maximum Current	160A		40A	
Meas. Accuracy	320A		80A	
± 3.0% of (Reading + Range)				
Short/OCP/OPP Test Function				
Short Time	Turbo OFF		100ms~10 Sec. or Continue	
	Turbo ON ^{*1}		100~1000ms	
Meas. Accuracy			NA	
OCP Time (Tstep)	Turbo OFF		100mS	
	Turbo ON ^{*1}		20mS	
Meas. Accuracy			NA	
OPP Time (Tstep)	Turbo OFF		100mS	
	Turbo ON ^{*1}		20mS	
Meas. Accuracy			NA	
BMS Test Mode ^{*3}				
Short Time	Turbo OFF		0.05mS~10ms	
	Turbo ON ^{*1}		0.05mS~10ms	
Meas. Accuracy			±0.005mS	
OCP Time (Tstep)	Turbo OFF		0.05mS~10ms / 11~1000ms	
	Turbo ON ^{*1}		0.05mS~10ms / 11~1000ms	
Meas. Accuracy			±0.005mS / ±0.2mS	
Fuse Test Mode ^{*4}				
Trip & Non-Trip Time	Turbo OFF		r1 : 1~5999ms, r2 : 6~16383sec	
	Turbo ON ^{*1}		1~1000mS	
Meas. Accuracy			r1 : ±0.2mS(<200mS), ±20mS(>200mS), r2: ±0.5S	
Repeat Cycle			0~255	
Surge Test Mode				
Surge current	0~320A		0~80A	
Normal current	0~160A		0~40A	
Surge Time			10~1000ms	
Surge Step			1~5	
MPPT Mode				
Algorithm			P&O	
Load mode			CV	
Dynamic Mode (50KHz)				
Timing				
Thigh & Tlow	0.010~9.999 / 99.99 / 999.9 / 9999mS			
Resolution	0.001 / 0.01 / 0.1 / 1mS			
Slew rate	10.8 ~ 675mA/us	10.8 ~ 6750mA/us	2.56 ~ 160mA/us	25.6 ~ 1600mA/us
Accuracy	± (5% of Setting) ±10uS			
Measurement				
Voltage Read Back				
Range (5 Digital)	8.04V	80.4V	60V	500V
Resolution	0.000134V	0.00134V	0.001V	0.01V
Accuracy	± 0.025% of (Reading + Range)			
Current Read Back				
Range (5 Digital)	16.02A	160.2A	4.02A	40.2A
Resolution	0.000267A	0.00267A	0.000067A	0.00067A
Accuracy	± 0.1% of (Reading + Range)			
Power Read Back				
Range (5 Digital)	100W	800W	100W	800W
Resolution	0.001W	0.01W	0.001W	0.01W
Accuracy	± 0.1% of (Reading + Range)			
Current Monitor	FULL SCALE 10V			
Accuracy	0.5% of (Setting + Range)			
Current Programming Input	FULL SCALE 10V			
Programmable Short	BUILT-IN			
Load ON Voltage	0.1 ~ 25V			0.4~100V
Accuracy	1% of (Setting + Range)			
Load OFF Voltage	0 ~ 25V			0~100V
Accuracy	0.025% of (Setting + Range)			
Typical Short Resistance	0.00415Ω		0.15Ω	
Maximum Short Current	160A		40A	
Dimension(HxWxD)	3317G / 3319G (187 x 486 x 269 mm / 14.5kg)		3317G-M / 3319G-M (143 x 418.8 x 216.4 mm / 7kg)	
Operating Temperature ^{*5}	0 ~ 40°C			

*1 : Up to 4 times rated current and power Turbo mode operation for Fuse, BMS, Short / OCP / OPP testing

*2 : CC Mode can be forced on Range II

*3 : The BMS test function is mainly applied to the Short / OCP / OPP and OCPD tests of the battery BMS protection board.

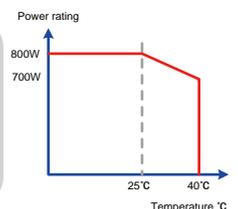
*4 : Fuse test function is mainly used for fuse and breaker testing

*5 : The operating temperature range is 0~40°C, the accuracy of this specification is only applicable to 25°C±5°C

Order Information



3317G-M / 3319G-M DC Electronic Load Mainframe (Option)



Power vs temperature curve