

3340G 系列

LED直流电子模拟负载



LED DC ELECTRONIC LOAD SIMULATOR



博计电子股份有限公司

236 新北市土城区中兴路7-1号

TEL : 886-2-2918-2620

FAX : 886-2-2912-9870

<http://www.prodigit.com.tw>

E-mail : pdsales@prodigit.com.tw



3341G	300V,	24A,	300W
3342G	500V,	12A,	300W
3343G	500V,	24A,	300W
3345G	120V,	4A,	150W
3346G	120V,	12A,	300W
33401G	500V,	6A,	150Wx2
33402G	120V,	2A,	75Wx2
33403G	120V,	6A,	150Wx2

电压可提高至600V (选购)



特 性

- 专供LED Driver测试的LED模式负载
- 定电流、定电阻、定电压、定功率、LED及动态操作模式
- 模拟LED顺向偏压(Vd)及导通电阻(Rd)
- 不只CC、CR、CP mode具备并联操作功能，CV mode亦具备 并联操作功能。
- 响应快速，可供PWM调光测试
- 内建调光控制所需之控制讯号
- 以外接Relay的方式做短路测试(内建控制Relay短路之驱动电路)
- 5位之数位电压，电流以及功率表
- 过电压、电流、功率及温度保护
- 须安装于机框3302G〔单个插槽机框〕3302G机框提供NTC模拟测试功能(选购)、3305G〔二个插槽机框〕或3300G〔四个插槽机框〕上，且机框上具有150组 储存/呼叫 记忆。
- 电压可提高至600V (选购)
- 可选用介面：GPIB、RS232、USB、LAN
- 3345G & 33402G的功率输入调光频率可达25KHZ，是市场上速度最快、频宽最宽的电子负载
- 3345G & 33402G的调光控制输出为DC-10KHZ

说 明

- 每个3340G系列模组均有独立的控制及显示面板、LED/定电流/定电阻/定电压/定功率/动态模式，配合3300G机框上的150组 储存/呼叫 记忆，能有效地控制所有负载的设定，更可透过RS232、Ethernet、USB和GPIB等介面进行远端控制。
- 以外接Relay的方式做短路测试(备有短路专用治具板可供选购)，并可设定短路时间及量测短路电压。
- 内建的调光控制讯号输出，方便于LED driver的PWM调光(Dimming)测试。
- 透过LED模式，设定顺向偏压(Vd)及导通电阻(Rd)，即可模拟LED的拉载特性。
- 可设定的吃载/停止吃载(LOAD ON/OFF)电压点及良/不良(GO/NG)的比较判断功能、电压极性显示可正可负及150组 储存/呼叫 记忆，使得负载更适用于各种不同的应用。
- 多达150组测试参数及状态的储存功能，让其可根据自动测试(auto sequence)需求，随时将储存记忆调出来任意使用。

应 用

- LED Driver
- 电压/电流源测试
- 交换式电源供应器暂态响应
- 定电压模式供限流测试及模拟电池
- 电池放电
- 电池充电
- 研发、品管
- ATE系统
- 生产测试

规格

MODEL	3341G		3342G		3343G		3345G		3346G		
Power	300W		300W		300W		150W		300W		
Current	0 ~ 6A 0 ~ 24A		0 ~ 3A 0 ~ 12A		0 ~ 6A 0 ~ 24A		0 ~ 1.2A 0 ~ 4A		0 ~ 3A 0 ~ 12A		
Voltage	0 ~ 300V		0 ~ 500V		0 ~ 500V		0 ~ 120V		0 ~ 120V		
Min. Operating Voltage	3V@24A		6V@12A		6V@24A		3V@4A		1.5V@12A		
Constant Current Mode											
Range*1	0 ~ 6A 0 ~ 24A		0 ~ 3A 0 ~ 12A		0 ~ 6A 0 ~ 24A		0 ~ 1.2A 0 ~ 4A		0 ~ 3A 0 ~ 12A		
Resolution	0.1mA 0.4mA		0.05mA 0.2mA		0.1mA 0.4mA		0.02mA 0.08mA		0.05mA 0.2mA		
Accuracy	± 0.1% OF (SETTING + RANGE)										
Constant Resistance Mode											
Range	CRL:0.125Ω~1.5KΩ (150V)	CRH:0.25Ω~3KΩ (300V)	CRL:0.5Ω~1.5KΩ (300V)	CRH:1Ω~3KΩ (500V)	CRL:0.25Ω~3KΩ (300V)	CRH:0.5Ω~6KΩ (500V)	CRL:0.75Ω~750Ω (60V)	CRH:1.5Ω~1.5KΩ (120V)	CRL:0.1Ω~1.2KΩ (60V)	CRH:0.2Ω~2.4KΩ (120V)	
Resolution	133.333μS	66.666μS	33.333μS	16.666μS	66.666μS	33.333μS	66.666μS	33.333μS	166.66μS	83.333μS	
Accuracy	± 0.2% OF (SETTING + RANGE)										
Constant Voltage Mode											
Range	30V / 150V / 300V		60V / 300V / 500V		60V / 300V / 500V		30V / 60V / 120V		12V / 60V / 120V		
Resolution	0.0005V / 0.0025V / 0.005V		0.001V / 0.005V / 0.01V		0.001V / 0.005V / 0.01V		0.0005V / 0.001V / 0.002V		0.2mV / 1mV / 2mV		
Accuracy	± 0.05% OF (SETTING + RANGE)										
Constant Power Mode											
Range	0 ~ 300W		0 ~ 300W		0 ~ 300W		0 ~ 150W		0 ~ 300W		
Resolution	0.005W		0.005W		0.005W		0.0025W		0.005W		
Accuracy	± 0.5% OF (SETTING + RANGE)										
LED Mode											
Vo Voltage Range	LEDL:30V/LEDM:150V/LEDH:300V		LEDL:60V/LEDM:300V/LEDH:500V		LEDL:60V/LEDM:300V/LEDH:500V		LEDL:30V/LEDM:60V/LEDH:120V		LEDL:12V / LEDM:60V / LEDH:120V		
Rd Resistance Range	LEDL: 0.125~125Ω@Vo-Vd=0~3V LEDL: 1.25~1.25KΩ@Vo-Vd=3~30V LEDM: 0.625~625Ω@Vo-Vd=0~15V LEDH: 6.25~6.25KΩ@Vo-Vd=15~150V LEDH: 1.25~1.25KΩ@Vo-Vd=0~30V LEDH: 12.5~12.5KΩ@Vo-Vd=30~300V		LEDL: 0.5~100Ω@Vo-Vd=0~6V LEDL: 5~1KΩ@Vo-Vd=6~60V LEDM: 2.5~500Ω@Vo-Vd=0~30V LEDH: 25~5KΩ@Vo-Vd=30~300V LEDH: 5~1KΩ@Vo-Vd=0~60V LEDH: 50~10KΩ@Vo-Vd=60~500V		LEDL: 0.25~125Ω@Vo-Vd=0~6V LEDL: 2.5~1.25KΩ@Vo-Vd=6~60V LEDM: 1.25~625Ω@Vo-Vd=0~30V LEDH: 12.5~6.25KΩ@Vo-Vd=30~300V LEDH: 2.5~1.25KΩ@Vo-Vd=0~60V LEDH: 25~12.5KΩ@Vo-Vd=60~500V		LEDL: 0.625~0.75KΩ@Vo-Vd=0~3V LEDL: 6.25~7.5KΩ@Vo-Vd=3~30V LEDM: 1.25~1.5KΩ@Vo-Vd=0~6V LEDH: 12.5~15KΩ@Vo-Vd=6~60V LEDH: 2.5~3KΩ@Vo-Vd=0~12V LEDH: 25~30KΩ@Vo-Vd=12~120V		LEDL: 0.1~120 Ω@Vo-Vd = 0~1.2V LEDL : 1~1.2KΩ@Vo-Vd = 1.2~12V LEDM: 0.5~600Ω@Vo-Vd = 0~12V LEDH: 5~6KΩ@Vo-Vd = 12~60V LEDH: 1~1.2KΩ@Vo-Vd = 0~60V LEDH: 10~12KΩ@Vo-Vd = 60~120V		
	16Bits										
	Resolution										
	Accuracy	Vd : ± (0.05% OF SETTING + 0.1% OF RANGE), Rd : ± (0.05% OF SETTING + 0.1% OF RANGE)									
Dynamic Mode											
Timing											
THIGH & TLOW	0.050 ~ 9.999 / 99.99 / 999.9 / 9999mS										
Resolution	0.001 / 0.01 / 0.1 / 1mS										
Accuracy	1μS / 10μS / 100μS / 1mS + 50ppm										
Slew Rate	4.8~300mA/μS	19.2~1200mA/μS	2.4~150mA/μS	9.6~600mA/μS	4.8~300mA/μS	19.2~1200mA/μS	0.96~60mA/μS	3.84~240mA/μS	2.4~150mA/μS	9.6~600mA/μS	
Resolution	1.2mA/μS	4.8mA/μS	0.6mA/μS	2.4mA/μS	1.2mA/μS	4.8mA/μS	0.24mA/μS	0.96mA/μS	0.6mA/μS	2.4mA/μS	
Accuracy	± (5%OF SETTING) ±10μS										
Min. Rise Time	20μS (Typical)										
Current											
Range	0 ~ 6A	0 ~ 24A	0 ~ 3A	0 ~ 12A	0 ~ 6A	0 ~ 24A	0 ~ 1.2A	0 ~ 4A	0 ~ 3A	0 ~ 12A	
Resolution	0.1mA	0.4mA	0.05mA	0.2mA	0.1mA	0.4mA	0.02mA	0.08mA	0.05mA	0.2mA	
Accuracy	± 0.1%OF (SETTING + RANGE)										
Measurement											
Voltage Read Back											
Range	30V / 150V / 300V		60V / 300V / 500V		60V / 300V / 500V		30V / 60V / 120V		12V / 60V / 120V		
Resolution	0.5mV / 2.5mV / 5mV		1mV / 5mV / 10mV		1mV / 5mV / 10mV		0.5mV / 1mV / 2mV		0.2mV / 1mV / 2mV		
Accuracy	± 0.025% OF (READING + RANGE)										
Current Read Back											
Range	6A	24A	3A	12A	6A	24A	1.2A	4A	3A	12A	
Resolution	0.1mA	0.4mA	0.05mA	0.2mA	0.1mA	0.4mA	0.02mA	0.08mA	0.05mA	0.2mA	
Accuracy	± 0.1%OF (READING + RANGE)										
Power Read Back											
Range	300W		300W		300W		150W		300W		
Accuracy	± 0.1%OF (READING + RANGE)										
General											
Imonitor	2.4A/V		1.2A/V		2.4A/V		0.4A/V		1.2A/V		
Accuracy	± 0.5 * OF (READING + RANGE)										
Short Signal Output	12V/100 mAmax										
Dimming Control											
Level Range	0 ~ 12V										
Resolution	0.048V										
Accuracy	1% of (SETTING + RANGE)										
Frequency Range	DC ~ 1KHz						DC ~ 10KHz		DC ~ 1KHz		
Resolution	10Hz						100Hz		10Hz		
Duty Range	0.01 ~ 0.99 (1%~99%)						0.1 ~ 0.9 (10%~90%)		0.01~0.99 (1%~99%)		
Resolution	0.01						0.1		0.01		
Temperature Coefficient	100ppm/°C(typical)										
Power	Supply from mainframe										
Operating Temperature*2	0 ~ 40°C										
Dimension(HxWxD)	143x108x405mm										
Weight	3.5kg										
Safety & EMC	CE										

输入电源：115/230 Vac ±10% · 50/60Hz

冷却方式：智慧型风扇冷却

注*1：CC Mode 可强制于 range II

注*2：操作温度范围为 0~40°C · 此规格表内之精确度仅适用于 25°C±5°C

订购方式

LED 直流电子负载模组

- **3341G** 300V · 24A · 300W
- **3342G** 500V · 12A · 300W
- **3343G** 500V · 24A · 300W
- **3345G** 120V · 4A · 150W
- **3346G** 120V · 12A · 300W



选购电压：600V
负载模组：3.5kg
W=108mm / H=143mm / D=405mm

电子负载机框：

选购介面：① GPIB Card ② RS232 Card ③ USB Card ④ LAN Card

3302G（单个插槽机框）



5.5kg
W=160mm
H=177mm
D=452mm

3305G（二个插槽机框）



7.5kg
W=269mm
H=177mm
D=452mm

3300G（四个插槽机框）



9.3kg
W=440mm
H=177mm
D=445mm

选购配备：

短路专用治具板



规格						
MODEL	33401G		33402G		33403G	
Power	150W × 2		75W × 2		150W × 2	
Current	0 ~ 1.5A	0 ~ 6A	0 ~ 0.6A	0 ~ 2A	0 ~ 1.5A	0 ~ 6A
Voltage	0 ~ 500V		0 ~ 120V		0 ~ 120V	
Min. Operating Voltage	4V@6A		3V@2A		1.8V@6A	
Constant Current Mode						
Range*1	0 ~ 1.5A	0 ~ 6A	0 ~ 0.6A	0 ~ 2A	0 ~ 1.5A	0 ~ 6A
Resolution	0.025mA	0.1mA	0.01mA	0.04mA	0.025mA	0.1mA
Accuracy	± 0.1% OF (SETTING + RANGE)					
Constant Resistance Mode						
Range	CRL:1Ω~3KΩ (300V)	CRH:2Ω~6KΩ (500V)	CRL:1.5Ω~1.5KΩ (60V)	CRH:3Ω~3KΩ (120V)	CRL:0.2Ω~2.4KΩ (60V)	CRH:0.4Ω~4.8KΩ (120V)
Resolution	16.666μS	8.333μS	33.33μS	16.66μS	83.333μS	41.666μS
Accuracy	± 0.2% OF (SETTING + RANGE)					
Constant Voltage Mode						
Range	60V / 300V / 500V		30V / 60V / 120V		12V / 60V / 120V	
Resolution	0.001V / 0.005V / 0.01V		0.0005V / 0.001V / 0.002V		0.2mV / 1mV / 2mV	
Accuracy	± 0.05% OF (SETTING + RANGE)					
LED Mode						
Vo Voltage Range	LEDL : 60V / LEDM : 300V / LEDH : 500V		LEDL : 30V / LEDM : 60V / LEDH : 120V		LEDL : 12V / LEDM : 60V / LEDH : 120V	
Rd Resistance Range	LEDL : 1 ~ 200Ω @ Vo-Vd = 0~6V LEDL : 10 ~ 2KΩ @ Vo-Vd = 6~60V LEDM : 5 ~ 1KΩ @ Vo-Vd = 0~30V LEDM : 50 ~ 10KΩ @ Vo-Vd = 30~300V LEDH : 10 ~ 2KΩ @ Vo-Vd = 0~60V LEDH : 100 ~ 20KΩ@ Vo-Vd = 60~500V		LEDL : 1.25 ~ 1.5KΩ @ Vo-Vd = 0~3V LEDL : 12.5 ~ 15KΩ @ Vo-Vd = 3~30V LEDM : 2.5 ~ 3KΩ @ Vo-Vd = 0~6V LEDM : 25 ~ 30KΩ @ Vo-Vd = 6~60V LEDH : 5 ~ 6KΩ @ Vo-Vd = 0~12V LEDH : 50 ~ 60KΩ @ Vo-Vd = 12~120V		LEDL : 0.2 ~ 240Ω @ Vo-Vd = 0~1.2V LEDL : 2 ~ 2.4KΩ @ Vo-Vd = 1.2~12V LEDM : 1 ~ 1.2KΩ @ Vo-Vd = 0~12V LEDM : 10 ~ 12KΩ @ Vo-Vd = 12~60V LEDH : 2 ~ 2.4KΩ @ Vo-Vd = 0~60V LEDH : 20 ~ 24KΩ @ Vo-Vd = 60~120V	
Resolution	16Bits					
Accuracy	Vd : ± (0.05% OF SETTING + 0.1% OF RANGE), Rd : ± (0.05% OF SETTING + 0.1% OF RANGE)					
Measurement						
Voltage Read Back						
Range	60V / 300V / 500V		30V / 60V / 120V		12V / 60V / 120V	
Resolution	1mV / 5mV / 10mV		0.5mV / 1mV / 2mV		0.2mV / 1mV / 2mV	
Accuracy	± 0.025% OF (READING + RANGE)					
Current Read Back						
Range	1.5A	6A	0.6A	2A	1.5A	6A
Resolution	0.025mA	0.1mA	0.01mA	0.04mA	0.025mA	0.1mA
Accuracy	± 0.1%OF (READING + RANGE)					
Power Read Back						
Range	150W		75W		150W	
Accuracy	± 0.1%OF (READING + RANGE)					
General						
Short Signal Output	12V / 100 mAmax					
Dimming Control						
Level Range	0 ~ 12V					
Resolution	0.048V					
Accuracy	1% of (SETTING + RANGE)					
Frequency Range	DC ~ 1KHz		DC ~ 10KHz		DC ~ 1KHz	
Resolution	10Hz		100Hz		10Hz	
Duty Range	0.01 ~ 0.99 (1%~99%)		0.1 ~ 0.9 (10%~90%)		0.01~ 0.99 (1%~99%)	
Resolution	0.01		0.1		0.01	
Temperature Coefficient	100ppm/°C(typical)					
Power	Supply from mainframe					
Operating Temperature*2	0 ~ 40°C					
Dimension(HxWxD)	143x108x405mm					
Weight	3.5kg					
Safety & EMC	CE					

输入电源：115/230 Vac ±10% · 50/60Hz
冷却方式：智慧型风扇冷却

注*1：CC Mode 可强制于 range II
注*2：操作温度范围为 0~40°C · 此规格表内之精确度仅适用于 25°C±5°C

订 购 方 式

LED 直流电子负载模组

- 33401G 500V · 6A · 150Wx2
- 33402G 120V · 2A · 75Wx2
- 33403G 120V · 6A · 150Wx2



选购电压：600V
负载模组：3.5kg
W=108mm / H=143mm / D=405mm

电子负载机框：

选购介面：① GPIB Card ② RS232 Card ③ USB Card ④ LAN Card

3302G（单个插槽机框）



5.5kg
W=160mm
H=177mm
D=452mm

3305G（二个插槽机框）



7.5kg
W=269mm
H=177mm
D=452mm

3300G（四个插槽机框）



9.3kg
W=440mm
H=177mm
D=445mm

选购配备：
短路专用刀具板

33401G / 33402G
33403G

