

34300E 系列

超高功率直流电子负载 (1250V)



COMPACT HIGH POWER DC ELECTRONIC LOAD



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





特 性

- 最大功率可达 320KW
- 最高达 8 台主/从并联控制
- 5位数之数位电压、电流以及功率表
- 高速量测及通讯传输速率
- 大型 LCD Display、可用飞梭旋钮或按键调整设定值
- 可同时显示电压值、电流值、瓦特值
- 适用于功率因数调整器(PFC)测试用 (600V,1000V机种)
- 可自动执行OCP、OPP测试
- 可设定开机状态值
- 于短路测试时可设定短路时间
- 定电流、定电阻、定电压、定功率、定电流 + 定电压、定功率 + 定电压、动态及短路模式
- 过电流、功率、温度保护及过电压示警
- 电压极性显示可设成正值 (" + ") 或负值 (" - ")
- 支援太阳能板MPPT CC、CR、CV测试
- 可选用介面：GPIB、RS232、USB、LAN
- 内建缓启动电路功能，允许UUT电源直接连接到34300E系列负载输入端，不再需要外接缓启动电路的大型继电器开关

说 明

- 34300E系列具有独立的控制及显示面板、定电流/定电阻/定电压/定功率/动态模式，配合面板上的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等接口进行远程控制。
- 具备短路测试功能及设定短路时间，并可量测短路电压及电流。
- 在定电流及定功率模式下，可做动态负载之仿真，其电流上升、下降斜率均为独立可调，另具有-外部输入任意波形之动态负载功能。
- 具有OCP、OPP单键测试功能，使得OCP、OPP之测试更有效率及准确。
- 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。
- 因其耐压可高达1250V，故而非常适用于功率因子调整器 (PFC) 的测试应用。
- 主/从控制最多为1个MASTER，7个SLAVE

应 用

- 电压/电流源测试
- 交换式电源供应器瞬时响应
- 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	34305E		34310E		34315E		34320E	
Power	5KW		10KW		15KW		20KW	
Current	0 ~ 2.5A	0 ~ 25A	0 ~ 5A	0 ~ 50A	0 ~ 7.5A	0 ~ 75A	0 ~ 10A	0 ~ 100A
Voltage	0 ~ 1250V							
Protections								
Over Power Protection (OPP)					105%			
Over Current Protection (OCP)					104%			
Over Voltage Protection (OVP)					104%			
Over Temp Protection (OTP)					Yes			
Constant Current Mode								
Range ^{*1}	2.5A	25A	5A	50A	7.5A	75A	10A	100A
Resolution	0.04mA	0.4mA	0.08mA	0.8mA	0.12mA	1.2mA	0.16mA	1.6mA
Accuracy ^{*2}	±0.05% of (Setting + Range)							
Constant Resistance Mode								
Range	60000Ω~50Ω	50Ω~2.502Ω	30000Ω~25Ω	25Ω~1.251Ω	20004Ω~16.67Ω	16.67Ω~0.834Ω	15000Ω~12.5Ω	12.5Ω~0.627Ω
Resolution	0.3334μS	0.834mΩ	0.6667μS	0.417mΩ	0.9998μS	0.278mΩ	1.3333μS	0.209mΩ
Accuracy	±0.2% of (Setting + Range)							
Constant Voltage Mode								
Range	1250V							
Resolution	20mV							
Accuracy	± 0.05% of (Setting + Range)							
Constant Power Mode								
Range	500W	5000W	1000W	10000W	1500W	15000W	2000W	20000W
Resolution	8mW	80mW	16mW	160mW	24mW	240mW	32mW	320mW
Accuracy ^{*3}	± 0.1% of (Setting + Range)							
Constant Voltage + Current Limit Mode								
Range	1250V	25A	1250V	50A	1250V	75A	1250V	100A
Resolution	20mV	0.4mA	20mV	0.8mA	20mV	1.2mA	20mV	1.6mA
Accuracy	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)
Constant Voltage + Power Limit Mode								
Range	1250V	5000W	1250V	10000W	1250V	15000W	1250V	20000W
Resolution	20mV	80mW	20mV	160mW	20mV	240mW	20mV	320mW
Accuracy	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)
MPPT Mode								
Algorithm	P&O							
Load mode	CV							
P&O interval	1000ms~60000ms ; resolution 1s							
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	0.002A~0.125A/μS	0.02A~1.25A/μS	0.004A~0.25A/μS	0.04A~2.5A/μS	0.006A~0.375A/μS	0.06A~3.75A/μS	0.008A~0.5A/μS	0.08A~5A/μS
Resolution	0.0005A/μS	0.005A/μS	0.001A/μS	0.01A/μS	0.0015A/μS	0.015A/μS	0.002A/μS	0.02A/μS
Min. Rise Time	20μs (typical)							
Accuracy	± (5% of Setting) ±10μs							
Current								
Range	0~2.5A	2.5~25A	0~5A	5~50A	0~7.5A	7.5~75A	0~10A	10~100A
Resolution	0.04mA	0.4mA	0.08mA	0.8mA	0.12mA	1.2mA	0.16mA	1.6mA
Measurement								
Voltage Read Back								
Range (5 Digital)	0~125V	125~1250V	0~125V	125~1250V	0~125V	125~1250V	0~125V	125~1250V
Resolution	2mV	20mV	2mV	20mV	2mV	20mV	2mV	20mV
Accuracy	± 0.025% of (Reading + Range)							
Current Read Back								
Range (5 Digital)	0~2.5A	2.5~25A	0~5A	5~50A	0~7.5A	7.5~75A	0~10A	10~100A
Resolution	0.04mA	0.4mA	0.08mA	0.8mA	0.12mA	1.2mA	0.16mA	1.6mA
Accuracy	± 0.05% of (Reading + Range)							
Power Read Back								
Range (5 Digital)	500W	5000W	1000W	10000W	1500W	15000W	2000W	20000W
Resolution	0.1W	1W	0.1W	1W	0.1W	1W	0.1W	1W
Accuracy ^{*4}	± 0.06% of (Reading + Range)							
General								
Short Circuit								
Current	25A		50A		75A		100A	
Load ON Voltage	1.0 ~ 250V							
Load OFF Voltage	0 ~ 250V							
Power Consumption	600VA		1000VA		1450VA		1900VA	
Operating Temperature ^{*2}	0~40℃							
Dimension (HxWxD)	573x647x766mm		573x647x766mm		728x647x766mm		885x647x766mm	
HxWxD (Not included wheels)	469x647x766mm		469x647x766mm		625x647x766mm		781x647x766mm	
Weight	100 kg		130 kg		170 kg		220 kg	
Safety & EMC								
	CE							

冷却方式：智慧型风扇冷却

输入电源：① Load-20KW内(含)：100~230 Vac ±10%，50/60Hz
② Load-25KW以上(含)：200~230 Vac ±10%，50/60Hz

注*1：CC Mode 可强制于rangeⅡ

注*2：假如操作电流低于range 0.1%，accuracy的规格是0.1% F.S.

注*3：假如操作电压高于600V，accuracy的规格是0.5% F.S.

注*4：Power F.S. = Vrange F.S. x Irange F.S.

注*5：操作温度范围为0~40℃。此规格表内之精确度仅适用于25℃±5℃

订购方式

选购介面：

选购配件：

① GPIB Card

② RS232 Card

③ USB Card

④ LAN Card



x4

34305E 1250V，25A，5KW



34310E 1250V，50A，10KW



34315E 1250V，75A，15KW



34320E 1250V，100A，20KW



规格

MODEL	34325E		34330E		34335E		34340E	
Power	25KW		30KW		35KW		40KW	
Current	0 ~ 12.5A	0 ~ 125A	0 ~ 15A	0 ~ 150A	0 ~ 17.5A	0 ~ 175A	0 ~ 20A	0 ~ 200A
Voltage	0 ~ 1250V							
Protections								
Over Power Protection (OPP)					105%			
Over Current Protection (OCP)					104%			
Over Voltage Protection (OVP)					104%			
Over Temp Protection (OTP)					Yes			
Constant Current Mode								
Range*1	12.5A	125A	15A	150A	17.5A	175A	20A	200A
Resolution	0.2mA	2mA	0.24mA	2.4mA	0.28mA	2.8mA	0.32mA	3.2mA
Accuracy	± 0.05% of (Setting + Range)							
Constant Resistance Mode								
Range	12000Ω~10Ω	10Ω~0.501Ω	9996Ω~8.33Ω	8.33Ω~0.417Ω	8568Ω~7.14Ω	7.14Ω~0.357Ω	7500Ω~6.25Ω	6.25Ω~0.315Ω
Resolution	1.6667μS	0.167mΩ	2.0008μS	0.139mΩ	2.334μS	0.119mΩ	2.6667μS	0.105mΩ
Accuracy	± 0.2% of (Setting + Range)							
Constant Voltage Mode								
Range	1250V							
Resolution	20mV							
Accuracy	± 0.05% of (Setting + Range)							
Constant Power Mode								
Range	2500W	25000W	3000W	30000W	3500W	35000W	4000W	40000W
Resolution	40mW	400mW	48mW	480mW	56mW	560mW	64mW	640mW
Accuracy	± 0.1% of (Setting + Range)							
Constant Voltage + Current Limit Mode								
Range	1250V	125A	1250V	150A	1250V	175A	1250V	200A
Resolution	20mV	2mA	20mV	2.4mA	20mV	2.8mA	20mV	3.2mA
Accuracy	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)
Constant Voltage + Power Limit Mode								
Range	1250V	25000W	1250V	30000W	1250V	35000W	1250V	40000W
Resolution	20mV	400mW	20mV	480mW	20mV	560mW	20mV	640mW
Accuracy	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)	±0.05% of (Setting+Range)	±1.0% of (Setting+Range)
MPPT Mode								
Algorithm	P&O							
Load mode	CV							
P&O interval	1000ms~60000ms ; resolution 1s							
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	0.01A~0.625A/μS	0.1A~6.25A/μS	0.012A~0.75A/μS	0.12A~7.5A/μS	0.014A~0.875A/μS	0.14A~8.75A/μS	0.016A~1A/μS	0.16A~10A/μS
Resolution	0.0025A/μS	0.025A/μS	0.003A/μS	0.03A/μS	0.0035A/μS	0.035A/μS	0.002A/μS	0.04A/μS
Min. Rise Time	20μs(typical)							
Accuracy	± (5% of Setting) ±10μs							
Current								
Range	0~12.5A	12.5~125A	0~15A	15~150A	0~17.5A	17.5~175A	0~20A	20~200A
Resolution	0.2mA	2mA	0.24mA	2.4mA	0.28mA	2.8mA	0.32mA	3.2mA
Measurement								
Voltage Read Back								
Range (5 Digital)	0~125V	125~1250V	0~125V	125~1250V	0~125V	125~1250V	0~125V	125~1250V
Resolution	2mV	20mV	2mV	20mV	2mV	20mV	2mV	20mV
Accuracy	± 0.025% of (Reading + Range)							
Current Read Back								
Range (5 Digital)	0~12.5A	12.5~125A	0~15A	15~150A	0~17.5A	17.5~175A	0~20A	20~200A
Resolution	0.2mA	2mA	0.24mA	2.4mA	0.28mA	2.8mA	0.32mA	3.2mA
Accuracy	± 0.05% of (Reading + Range)							
Power Read Back								
Range (5 Digital)	2500W	25000W	3000W	30000W	3500W	35000W	4000W	40000W
Resolution	0.1W	1W	0.1W	1W	0.1W	1W	0.1W	1W
Accuracy	± 0.06%% of (Reading + Range)							
General								
Short Circuit								
Current	125A		150A		175A		200A	
Load ON Voltage	1.0 ~ 250V							
Load OFF Voltage	0 ~ 250V							
Power Consumption	2350VA		2800VA		3250VA		3700VA	
Operating Temperature*2	0~40℃							
Dimension (HxWxD)	1047x647x766mm		1197x647x766mm		1353x647x766mm		1509x647x766mm	
HxWxD (Not included wheels)	937x647x766mm		1093x647x766mm		1249x647x766mm		1405x647x766mm	
Weight	280 kg		340 kg		390 kg		430 kg	
Safety & EMC								
	CE							

冷却方式：智慧型风扇冷却

输入电源：① Load-20KW内(含)：100~230 Vac ±10%，50/60Hz

② Load-25KW以上(含)：200~230 Vac ±10%，50/60Hz

注*1：CC Mode 可强制于rangeⅡ

注*2：假如操作电流低于range 0.1%，accuracy的规格是0.1% F.S.

注*3：假如操作电压高于600V，accuracy的规格是0.5% F.S.

注*4：Power F.S. = Vrange F.S. x Irange F.S.

注*5：操作温度范围为0~40℃。此规格表内之精确度仅适用于25℃±5℃

订购方式

选购介面：

- 1 GPIB Card
- 2 RS232 Card
- 3 USB Card
- 4 LAN Card

选购配件：

吊环



x4

34325E 1250V，125A，25KW

34330E 1250V，150A，30KW

34335E 1250V，175A，35KW

34340E 1250V，200A，40KW