

3310F Series Programmable DC Electronic Load



■ Features

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| ■ 5 digital V/A/W Meter | ■ Power ON status value can be set |
| ■ High-speed measurement and communication transmission | ■ Flexible CC, CR, CV, CP, Dynamic and Short operation modes |
| ■ V.A.W. values can be displayed simultaneously | ■ SHORT time setting and SHORT_VH, SHORT_VL setting function |
| ■ LCD large display | ■ Protections against V, I, W, and °C |
| ■ Setting values can be adjusted by rotary knob or push button | ■ Voltage meter display the polarity positive ("+") or negative ("-") is selectable |
| ■ OCP 、 OPP test function | ■ SYNC. Load ON function |
| ■ Can be configured in 3302F [single channel mainframe] 、 3305F [two channels mainframe] or 3300F [four channels mainframe] and the mainframe with 150 sets Store/Recall memory | ■ Standard interface: RS232 |
| | ■ Optional Interface : GPIB 、 RS232 、 USB 、 LAN |

■ Descriptions

- Each 3310F Series module has its own control and display panel, CC/CR/CV/CP/Dynamic modes, 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 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 and there is an external signal input so that load can have a simulated Arbitrary Waveform.
- The additional OCP 、 OPP test function operated by both mainframe and module that 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 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

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

■ Specifications

MODEL		3310 F		3311F		3312F		3314F		3315F	
MAX POWER		150 W		300 W		300 W		300 W		75 W	
MAX CURRENT		30 A		60 A		12 A		12 A		15 A	
OPERATION VOLTAGE		60 V		60 V		250 V		500 V		60 V	
OVER POWER PROTECTION		≈ 157.5 W		≈ 315 W		≈ 315 W		≈ 315 W		≈ 78.75 W	
OVER CURRENT PROTECTION		≈ 31.5 A		≈ 63 A		≈ 12.6 A		≈ 12.6 A		≈ 15.75 A	
OVER VOLTAGE PROTECTION		≈ 63 V		≈ 63 V		≈ 262.5 V		≈ 525 V		≈ 63 V	
OVER TEMP. PROTECTION		≈ 85 °C		≈ 85 °C		≈ 85 °C		≈ 85 °C		≈ 85 °C	
CC MODE	CC MODE	0-3 A	0-30 A	0-6 A	0-60 A	0-1.2 A	0-12 A	0-1.2 A	0-12 A	0-1.5 A	0-15 A
	RESOLUTION	0.05 mA	0.5 mA	0.1 mA	1mA	0.02 mA	0.2mA	0.02 mA	0.2 mA	0.0254 mA	0.25 mA
	ACCURACY	± 0.1% OF (SETTING + RANGE)									
CR MODE	RANGE	2 - 120 KΩ	0.02 - 2 Ω	1 - 60 KΩ	0.015 -1Ω	25 -1500 KΩ	0.08 - 25 Ω	50 - 3000 KΩ	0.5 - 50 Ω	4 - 24 KΩ	0.02 - 4 Ω
	RESOLUTION	0.00833 mS	33.334 μΩ	0.01666 mS	16.667 μΩ	0.000666 mS	416.667 μΩ	0.000333 mS	833.334 μΩ	0.04166 mS	66.667 μΩ
	ACCURACY	± 0.2% OF (SETTING + RANGE)									
CV MODE	RANGE	0 - 6 V	0 - 60 V	0 - 6V	0 - 60V	0 - 30V	0 - 250 V	0 - 60 V	0 - 500 V	0 - 6 V	0 - 60 V
	RESOLUTION	0.1 mV	1 mV	0.1 mV	1 mV	1 mV	10 mV	0.001 V	0.01 V	0.0001V	0.001V
	ACCURACY	± 0.05% OF (SETTING + RANGE)									
CP MODE	RANGE	0 -15 W	0 -150 W	0 - 30 W	0 - 300 W	0 - 30W	0 - 300W	0 - 30W	0 - 300 W	0- 7.5 W	0 - 75 W
	RESOLUTION	0.25 mW	2.5 mW	1 mW	10 mW	1 mW	10 mW	0.001W	0.01 W	0.000125 W	0.00125 W
	ACCURACY	± 0.5% OF (SETTING + RANGE)									
DYNAMIC OPERATION	THIGH & TLOW	50 μSec TO 9.999 Sec									
	SLEW RATE	2.0 -125 mA/ μSec	20 -1250 mA/ μSec	4 -250 mA/ μSec	40 -2500 mA/ μSec	0.8 - 50 mA/ μSec	8 - 500 mA/ μSec	0.8 - 50 mA/ μSec	8.0 - 500 mA/ μSec	1.0 - 62.5 mA/ μSec	10.0 - 625 mA/ μSec
	ACCURACY	± (5% OF SETTING) ±10 μS									
VOLTAGE READBACK (V METER)	RANGE	6.0 V	60.0 V	6.0 V	60.0 V	30.0V	250.0V	60.0V	500.0 V	6.0 V	60.0 V
	RESOLUTION	0.0001V	0.001V	0.0001V	0.001V	0.001V	0.01V	0.001V	0.01V	0.0001V	0.001V
	ACCURACY	± 0.025% OF (READING + RANGE)									
CURRENT READBACK (A METER)	RANGE	3.0 A	30.0 A	6.0 A	60.0 A	1.2 A	12.0 A	1.2 A	12.0 A	1.5 A	15.0 A
	RESOLUTION	0.0001 A	0.001 A	0.0001 A	0.001 A	0.00002 A	0.0002 A	0.00002 A	0.0002 A	0.000025 A	0.00025 A
	ACCURACY	± 0.1% OF (READING + RANGE)									
CURRENT MONITOR	FULL SCALE 10V (NON-ISOLATED WITH LOAD MODULE)										
ACCURACY	0.5% OF (SETTING + RANGE)										
CURRENT PROGRAM INPUT	FULL SCALE 10V (NON-ISOLATED WITH OTHER LOAD MODULE)										
PROGRAMMABLE SHORT	BUILT - IN										
LOAD ON VOLTAGE	0.1 - 25 V			0.1 - 25 V			0.2 - 50 V		0.4 - 100V		0.1 - 25 V
ACCURACY	1% of (Setting + Range)										
LOAD OFF VOLTAGE	0 - 25 V			0 - 25 V			0 - 50 V		0 - 100V		0 - 25 V
ACCURACY	0.025% of (Setting + Range)										
Typical SHORT RESISTANCE	0.02 Ω			0.0083 Ω			0.08 Ω		0.5Ω		0.02 Ω
MAX. SHORT CURRENT	30 A			60 A			12 A		12 A		15 A

■ Order Information

■ Plug-in Dynamic Load Module :

3310F	60V · 30A · 150W	3314F	500V · 12A · 300W
3311F	60V · 60A · 300W	3315F	60V · 15A · 75W
3312F	250V · 12A · 300W		

■ Plug-in Dynamic Load Mainframe (RS232 is standard interface) :

3302F	[single channel mainframe]	3305F	[two channels mainframe]
3300F	[four channels mainframe]		

Optional interface : ① GPIB Card ② RS232 Card ③ USB Card ④ LAN Card



Plug-in Dynamic Load Module



3302F



3305F



3300F

PRODIGIT
INSTRUMENT PROFESSIONAL

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