

# 3310F Series Programmable DC Electronic Load



## ■ Features

<ul style="list-style-type: none"> <li>■ 5 digital V/A/W Meter</li> </ul>	<ul style="list-style-type: none"> <li>■ Power ON status value can be set</li> </ul>
<ul style="list-style-type: none"> <li>■ High-speed measurement and communication transmission</li> </ul>	<ul style="list-style-type: none"> <li>■ Flexible CC, CR, CV, CP, Dynamic and Short operation modes</li> </ul>
<ul style="list-style-type: none"> <li>■ V.A.W. values can be displayed simultaneously</li> </ul>	<ul style="list-style-type: none"> <li>■ SHORT time setting and SHORT_VH, SHORT_VL setting function</li> </ul>
<ul style="list-style-type: none"> <li>■ LCD large display</li> </ul>	<ul style="list-style-type: none"> <li>■ Protections against V, I, W, and °C</li> </ul>
<ul style="list-style-type: none"> <li>■ Setting values can be adjusted by rotary knob or push button</li> </ul>	<ul style="list-style-type: none"> <li>■ Voltage meter display the polarity positive ("+") or negative ("-") is selectable</li> </ul>
<ul style="list-style-type: none"> <li>■ OCP、OPP test function</li> </ul>	<ul style="list-style-type: none"> <li>■ SYNC. Load ON function</li> </ul>
<ul style="list-style-type: none"> <li>■ 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</li> </ul>	<ul style="list-style-type: none"> <li>■ <del>Standard interface: RS232</del></li> <li>■ Optional Interface : GPIB、RS232、USB、LAN</li> </ul>

## ■ 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

- |                                                                       |                                                                             |                                                                                                                                 |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>■ Battery charger</li> </ul>   | <ul style="list-style-type: none"> <li>■ Voltage/Current source</li> </ul>  | <ul style="list-style-type: none"> <li>■ Current limit testing and battery emulation</li> </ul>                                 |
| <ul style="list-style-type: none"> <li>■ Battery discharge</li> </ul> | <ul style="list-style-type: none"> <li>■ SMPS transient response</li> </ul> | <ul style="list-style-type: none"> <li>■ R&amp;D Quality Control</li> <li>■ ATE system</li> <li>■ Production testing</li> </ul> |

## 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	0-1.2A	0-12 A	0-1.2A	0-12 A	0-1.5 A	0-15 A
	RESOLUTION	0.05 mA	0.5 mA	0.1 mA	1mA	0.02mA	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	25-1500KΩ	0.08 - 25 Ω	50 - 3000KΩ	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 - 60V	0 - 500 V	0 - 6 V	0 - 60 V
	RESOLUTION	0.1 mV	1 mV	0.1 mV	1 mV	1 mV	10 mV	0.001V	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 - 300 W	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	0.001 W	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 (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 (A METER)	RANGE	3.0 A	30.0 A	6.0 A	60.0 A	1.2A	12.0A	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 Module

### 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



3302F



3305F



3300F

**PRODIGIT**  
INSTRUMENT PROFESSIONAL

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