

# 3350F Series High Power DC Electronic Load

**3350F** 60V, 120A, 1200W

**3351F** 60V, 120A, 1800W

**3352F** 60V, 240A, 1200W

**3353F** 60V, 240A, 1800W

**3354F** 60V, 360A, 1800W

**3356F** 60V, 120A, 600W



## Features

- 5 digit V / A / W Meter.
- High - speed measurement and communication transmission.
- Large LCD Display, setting values can be adjusted by rotary knob or push button.
- Voltage, Current and Watt value can be displayed simultaneously.
- OCP, OPP test function.
- Power ON status can be set.
- CC, CR, CV, CP, Dynamic and Short operation mode.
- SHORT time setting.
- Protections against V,I,W, and  $\tau$ .
- Voltage meter display the polarity positive (" + ") or negative (" - ") is selectable.
- Optional Interface : GPIB, RS232, USB, LAN.

## Descriptions

- 3350F 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 remote controlled via GPIB, RS232, USB and LAN 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 for a Arbitrary Waveform to simulate load current.
- Single key for OCP \ OPP test function 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, user can recall the storage memory real time in accordance with the auto sequence requirement.

## Applications

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

## Specifications

MODEL	3350F	3351F	3352F	3353F	3354F	3356F
Power	1200W	1800W	1200W	1800W	1800W	600W
Current	0 ~ 120A	0 ~ 120A	0 ~ 240A	0 ~ 240A	0 ~ 360A	0 ~ 120A
Voltage	0 ~ 60V	0 ~ 60V	0 ~ 60V	0 ~ 60V	0 ~ 60V	0 ~ 60V
Min.Operation Voltage	0.6V @ 120A	0.4V @ 120A	0.7V @ 240A	0.7V @ 240A	0.7V @ 360A	0.6V @ 120A
<b>CC MODE</b>						
Range *1	0 ~ 12A / 120A	0 ~ 12A / 120A	0 ~ 24A / 240A	0 ~ 24A / 240A	0 ~ 36A / 360A	0 ~ 12A / 120A
Resolution	0.2mA / 2mA	0.2mA / 2mA	0.4mA / 4mA	0.4mA / 4mA	0.6mA / 6mA	0.2mA / 2mA
Accuracy	0.1% + 0.1% F.S.					
<b>CR MODE</b>						
Range	0.0083~0.5~30KΩ	0.0083~0.5~30KΩ	0.0041~0.25~15KΩ	0.0041~0.25~15KΩ	0.0027~0.167~10KΩ	0.0083~0.5~30KΩ
Resolution	0.0083mΩ/0.033mS	0.0083mΩ/0.033mS	0.0041mΩ/0.066mS	0.0041mΩ/0.066mS	0.0027mΩ/0.1mS	0.0083mΩ/0.033mS
Accuracy	0.2% OF ( Setting + Range )					
<b>CV MODE</b>						
Range	6V / 60V					
Resolution	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV
Accuracy	0.05% + 0.05% F.S.					
<b>CP MODE</b>						
Range	120W / 1200W	180W / 1800W	120W / 1200W	180W / 1800W	180W / 1800W	60W / 600W
Resolution	2mW / 20mW	3mW / 30mW	2mW / 20mW	3mW / 30mW	3mW / 30mW	1mW / 10mW
Accuracy	0.5% + 0.5% F.S.					
<b>DYNAMIC MODE - CC</b>						
<b>Timing</b>						
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	8mA~500mA/μS 80mA~5000mA/μS	8mA~500mA/μS 80mA~5000mA/μS	16mA~1000mA/μS 160mA~10000mA/μS	16mA~1000mA/μS 160mA~10000mA/μS	24mA~1500mA/μS 240mA~15000mA/μS	8mA~500mA/μS 80mA~5000mA/μS
Resolution	8 bits					
Accuracy	( 5% of setting ) ± 10 μS					
Min. Rise Time	24μS ( typical )					
<b>Current</b>						
Range	12 / 120A	12 / 120A	24 / 240A	24 / 240A	36 / 360A	12 / 120A
Resolution	0.2mA / 2mA	0.2mA / 2mA	0.4mA / 4mA	0.4mA / 4mA	0.6mA / 6mA	0.2mA / 2mA
<b>MEASUREMENT</b>						
<b>Voltage Read Back</b>						
Range (5 Digital)	0 ~ 6V / 60V	0 ~ 6V / 60V	0 ~ 6V / 60V	0 ~ 6V / 60V	0 ~ 6V / 60V	0 ~ 6V / 60V
Resolution	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV	0.1mV / 1mV
Accuracy	0.025% + 0.025% F.S.					
<b>Current Read Back</b>						
Range (5 Digital)	0 ~ 12A / 120A	0 ~ 12A / 120A	0 ~ 24A / 240A	0 ~ 24A / 240A	0 ~ 36A / 360A	0 ~ 12A / 120A
Resolution	0.2mA / 2mA	0.2mA / 2mA	0.4mA / 4mA	0.4mA / 4mA	0.6mA / 6mA	0.2mA / 2mA
Accuracy	0.1% + 0.1% F.S.					
<b>Power Read Back</b>						
Range (5 Digital)	0 ~ 1200W	0 ~ 1800W	0 ~ 1200W	0 ~ 1800W	0 ~ 1800W	0 ~ 600W
Resolution	0.0001W					
Accuracy	0.125% + 0.125% F.S.					
<b>PROTECTIONS</b>						
Over Power	105% of Rated Power					
Over Current	105% of Rated Current					
Over Voltage	105% of Rated Voltage					
Over Temp.	Yes					
<b>OTHERS</b>						
<b>Load ON Voltage</b>						
Range	0.1 ~ 25.0V					
Resolution	0.1V					
Accuracy	1% of Setting + 0.25V					
<b>Load OFF Voltage</b>						
Range	0 ~ 25V					
Resolution	Same as Voltage Meter					
Accuracy	Same as Voltage Meter					
<b>GENERAL</b>						
<b>Short Circuit</b>						
Current	120A	120A	240A	240A	360A	120A
Temperature Coefficient	100ppm / °C ( typical )					
Power consumption	80Wmax	80Wmax	80Wmax	80Wmax	80Wmax	80Wmax
Operating Temperature *2	0 ~ 40°C					
Dimension (HxWxD)	177 x 440 x 445 mm					
Weight	19.4 Kg	23.6 Kg	19.4 Kg	23.6 Kg	23.6 Kg	15.2 Kg
Safety & EMC	CE					

Input AC Power : 115/230 Vac ±10% , 50/60Hz  
Cooling : Advanced Fan Cooled

Note\*1 : The range is automatically or forcing to range II only in CC Mode

Note\*2 : Operating temperature range is 0~40°C , all specifications apply for 25°C±5°C

## Order Information

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