

With Synchronic parallel control capability, 6330A series loads allow users to parallel and synchronize more than one load together from an internal loading control signal. This feature provides synchronic dynamic loading test for multi-output power and high power test solution.

KEY FEATURES

- Improve operating speeds of load for auto test system integration
- Synchronous paralleling control mode, allow Synchronous load control under static and dynamic Loading mode up to 7000W
- Up to 8 channels in one mainframe, fit for testing Multiple output SMPS.
- GPIB/RS-232/USB Interface
- Max Power: 200W, 100W x 2(Dual), 30W&250W, 300W, 350W, 600W, 1200W
- Voltage Range: 0~80V / 0~120V / 0~500V
- CC, CR, CV, CP operating modes
- Dynamic loading with speed up to 20kHz
- Programmable slew rate, up to 10A/ μ s
- Only need 0.6V to draw rated current (63323A)
- Individual panel meters
- Real time power supplies load transient response simulation and output measurement
- 16-bit precision voltage and measurement with dual-range selection
- Remote sensing capability
- Short circuit test
- Self-test at power-on
- CE marking

Chroma Model 6330A series high speed DC electronic improves CPU clock, baud rate, parser and added synchronic parallel function for fast operation, which is ideal for auto test system integration to increase your manufacturing test throughput. Plugging the user selectable load modules into the system mainframe can also provide easy system configuration and future reconfiguration configure the system.

The 6330A family offers 12 types of modular loads with power ranging from 30 watts to 1200 watts, current from 0.5mA to 240A, and voltage measurement from 0.5mV to 500V. Each load is isolated and floating, programmable in dual current range and measuring voltage range, and capable of synchronizing with other modules for control operating. The load can be operated in constant current, constant voltage, and constant resistance.

Real time measurement of voltage, current, is integrated into each 6330A load module using a 16-bit precision measurement circuit. The user can perform on line voltage measurement and adjustment, or simulate short circuit test using the simple keypad on the front panel.

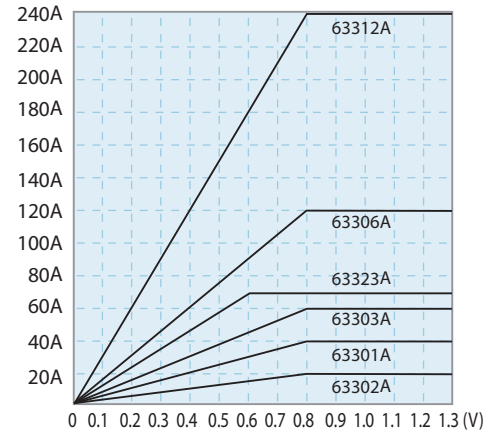
The 6330A have self-diagnosis routine to maintain instrumental performance all the time. It is also protected against OP, OC, OT protection, and alarm indicating OV, reverse polarity to guarantee quality and reliability for even the most demanding engineering testing and ATE application.

The FET technology accomplishes minimum input resistance and enables the load to sink high current even at very low voltage. For example, model 63303A is capable of sinking 60A at 1V output, and well-suited for testing the new 3V low voltage power supplies. Low voltage operation, down to zero volt, is possible at correspondingly reduced current level. (see below)

Chroma has created the industries first LED Load Simulator for simulating LED loading with our 63310A load model from our 6330A series Electronic Loads. By setting the LED power driver's output voltage, and current, the Electronic Load can simulate the LED's loading characteristics. The LED's forward voltage and operating resistance can also be set to further adjust the loading current and ripple current to better simulate LED characteristics. The 63310A design also has increased bandwidth to allow for PWM dimming testing.

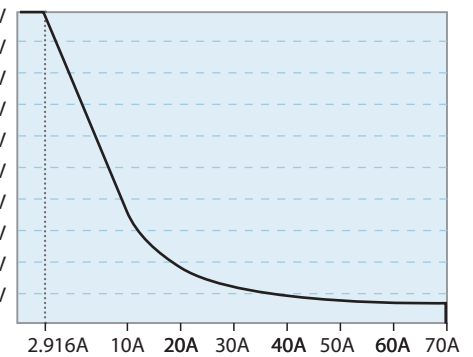
Low Voltage Characteristics (Typical)

Model 63301A/63302A/63303A/
63306A/63312A/63323A

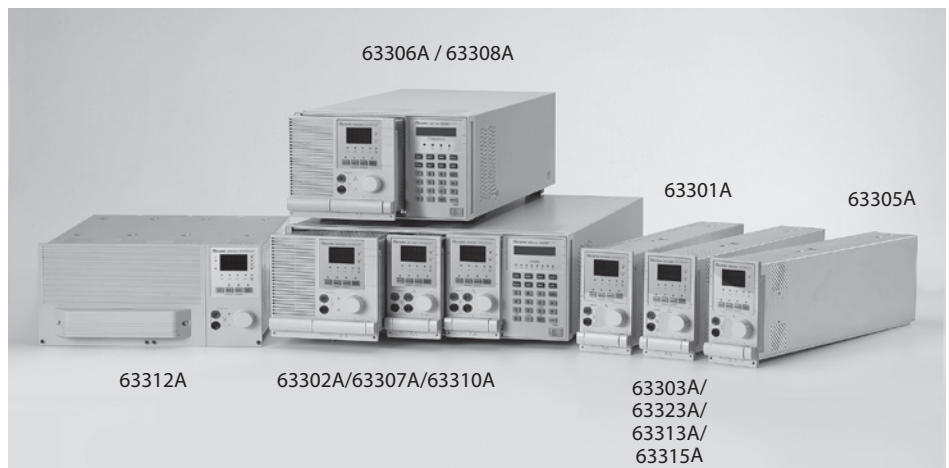


Note: All specifications are measured at load input terminals. (Ambient Temperature of 25°C)

Model 63323A Input Characteristics



6330A Series High Speed DC Electronic Load Family



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| SPECIFICATIONS-1 | | | | | | |
|------------------------------------------|-----------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------|----------------------|
| Model | 63301A | | 63302A (100Wx2) | | 63303A | |
| Power | 20W | 200W | 20W | 100W | 30W | 300W |
| Current | 0~4A | 0~40A | 0~2A | 0~20A | 0~6A | 0~60A |
| Voltage *3 | 0~80V | | 0~80V | | 0~80V | |
| Min. Operation Voltage (DC) *1 (Typical) | 0.4V@2A 0.8V@4A | 0.4V@20A 0.8V@40A | 0.4V@1A 0.8V@2A | 0.4V@10A 0.8V@20A | 0.4V@3A 0.8V@6A | 0.4V@30A 0.8V@60A |
| Constant Current Mode | | | | | | |
| Range | 0~4A | 0~40A | 0~2A | 0~20A | 0~6A | 0~60A |
| Resolution | 1mA | 10mA | 0.5mA | 5mA | 1.5mA | 15mA |
| Accuracy | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. |
| Constant Resistance Mode | | | | | | |
| Range | 0.0375 Ω ~150 Ω (200W/16V) 1.875 Ω ~7.5k Ω (200W/80V) | | 0.075 Ω ~300 Ω (100W/16V) 3.75 Ω ~15k Ω (100W/80V) | | 0.025 Ω ~100 Ω (300W/16V) 1.25 Ω ~5k Ω (300W/80V) | |
| Resolution*5 | 6.667mS (200W/16V) 133μS (200W/80V) | | 3.333mS (100W/16V) 66.667μS (100W/80V) | | 10mS (300W/16V) 200μS (300W/80V) | |
| Accuracy | 150 Ω : 0.1S + 0.2% 7.5k Ω : 0.01S + 0.1% | | 300 Ω : 0.1S + 0.2% 15k Ω : 0.01S + 0.1% | | 100 Ω : 0.1S + 0.2% 5k Ω : 0.01S + 0.1% | |
| Constant Voltage Mode | | | | | | |
| Range | 0~80V | | 0~80V | | 0~80V | |
| Resolution | 20mV | | 20mV | | 20mV | |
| Accuracy | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | |
| Constant Power Mode | | | | | | |
| Range | 0~20W | 0~200W | 0~20W | 0~100W | 0~30W | 0~300W |
| Resolution | 5mW | 50mW | 5mW | 25mW | 7.5mW | 75mW |
| Accuracy | 0.5% + 0.5%F.S. | | 0.5% + 0.5%F.S. | | 0.5% + 0.5%F.S. | |
| Dynamic Mode | | | | | | |
| Dynamic Mode | C.C. Mode | | C.C. Mode | | C.C. Mode | |
| T1 & T2 | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | |
| Accuracy | 1μs/1ms+100ppm | | 1μs/1ms+100ppm | | 1μs/1ms+100ppm | |
| Slew Rate | 0.64~160mA/μs | 6.4~1600mA/μs | 0.32~80mA/μs | 3.2~800mA/μs | 0.001~0.25A/μs | 0.01~2.5A/μs |
| Resolution | 0.64mA/μs | 6.4mA/μs | 0.32mA/μs | 3.2mA/μs | 0.001A/μs | 0.01A/μs |
| Accuracy | 10% ± 20μs | | 10% ± 20μs | | 10% ± 20μs | |
| Min. Rise Time | 10μs (Typical) | | 10μs (Typical) | | 10μs (Typical) | |
| Current | 0~4A | 0~40A | 0~2A | 0~20A | 0~6A | 0~60A |
| Resolution | 1mA | 10mA | 0.5mA | 5mA | 1.5mA | 15mA |
| Accuracy | 0.4%F.S. | | 0.4%F.S. | | 0.4%F.S. | |
| Measurement Section | | | | | | |
| Voltage Read Back | | | | | | |
| Range | 0~16V | 0~80V | 0~16V | 0~80V | 0~16V | 0~80V |
| Resolution | 0.25mV | 1.25mV | 0.25mV | 1.25mV | 0.25mV | 1.25mV |
| Accuracy | 0.025% + 0.025%F.S. | | 0.025% + 0.025%F.S. | | 0.025% + 0.025%F.S. | |
| Current Read Back | | | | | | |
| Range | 0~4A | 0~40A | 0~2A | 0~20A | 0~6A | 0~60A |
| Resolution | 0.0625mA | 0.625mA | 0.03125mA | 0.3125mA | 0.09375mA | 0.9375mA |
| Accuracy | 0.05% + 0.05%F.S. | | 0.05% + 0.05%F.S. | | 0.05% + 0.05%F.S. | |
| Power Read Back*2 | | | | | | |
| Range | 0~20W | 0~200W | 0~20W | 0~100W | 0~30W | 0~300W |
| Accuracy | 0.1% + 0.1%F.S. | | 0.1% + 0.1%F.S. | | 0.1% + 0.1%F.S. | |
| Protective Section | | | | | | |
| Over Power Protection | Yes | | Yes | | Yes | |
| Over Current Protection | Yes | | Yes | | Yes | |
| Over Temperature Protection | Yes | | Yes | | Yes | |
| Over Voltage Alarm*3 | Yes | | Yes | | Yes | |
| General | | | | | | |
| Short Circuit | | | | | | |
| Current (CC) | - | ≅ 40A | - | ≅ 20A | - | ≅ 60A |
| Voltage (CV) | - | 0V | - | 0V | - | 0V |
| Resistance (CR) | - | ≅ 0.0375 Ω | - | ≅ 0.075 Ω | - | ≅ 0.025 Ω |
| Power (CP) | - | ≅ 200W | - | ≅ 100W | - | ≅ 300W |
| Input Resistance (Load Off) | 100k Ω (Typical) | | 100k Ω (Typical) | | 100k Ω (Typical) | |
| Temperature Coefficient | 100PPM/°C (Typical) | | 100PPM/°C (Typical) | | 100PPM/°C (Typical) | |
| Power | Supply from 6334A Mainframe | | Supply from 6334A Mainframe | | Supply from 6334A Mainframe | |
| Dimension (H x W x D) | 172x82x489.5mm / 6.8x3.2x19.3inch | | 172x82x489.5mm / 6.8x3.2x19.3inch | | 172x82x489.5mm / 6.8x3.2x19.3inch | |
| Weight | 4.2 kg / 9.3 lbs | | 4.2 kg / 9.3 lbs | | 4.2 kg / 9.3 lbs | |
| Operating Range | 0~40°C | | 0~40°C | | 0~40°C | |
| EMC & Safety | CE | | CE | | CE | |

Battery Test & Automation Solution
Photovoltaic Test & Automation Solution
Semiconductor/IC Test Solution
Laser Diode Test Solution
LED/Lighting Test Solution
FPD Test Solution
Video & Color Test Solution
Automated Optical Inspection Solution
Power Electronics Test Solution
Passive Component Test Solution
Electrical Safety Test Solution
General Purpose Test Solution
Thermoelectric Test & Control Solution
PXI Test & Measurement Solution
Manufacturing Execution Systems Solution

| SPECIFICATIONS-2 | | | | |
|------------------------------------------|-----------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------------------------------|-----------------------|
| Model | 63305A | | 63306A | |
| Power | 30W | 300W | 60W | 600W |
| Current | 0~1A | 0~10A | 0~12A | 0~120A |
| Voltage*3 | 0~500V | | 0~80V | |
| Min. Operation Voltage (DC) *1 (Typical) | 1.0V@0.5A 2.0V@1A | 1.0V@5A 2.0V@10A | 0.4V@6A 0.8V@12A | 0.4V@60A 0.8V@120A |
| Constant Current Mode | | | | |
| Range | 0~1A | 0~10A | 0~12A | 0~120A |
| Resolution | 0.25mA | 2.5mA | 3mA | 30mA |
| Accuracy | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. |
| Constant Resistance Mode | | | | |
| Range | 1.25 Ω ~ 5 Ω (300W/125V) 50 Ω ~ 200k Ω (300W/500V) | | 12.5m Ω ~ 50 Ω (600W/16V) 0.625 Ω ~ 2.5k Ω (600W/80V) | |
| Resolution*5 | 200μS (300W/125V) 5μS (300W/500V) | | 20mS (600W/16V) 400μS (600W/80V) | |
| Accuracy | 5k Ω : 20mS + 0.2% 200k Ω : 5mS + 0.1% | | 50 Ω : 0.4S + 0.5% 2.5k Ω : 0.04S + 0.2% | |
| Constant Voltage Mode | | | | |
| Range | 0~500V | | 0~80V | |
| Resolution | 125mV | | 20mV | |
| Accuracy | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | |
| Constant Power Mode | | | | |
| Range | 0~30W | 0~300W | 0~60W | 0~600W |
| Resolution | 7.5mW | 75mW | 15mW | 150mW |
| Accuracy | 0.5% + 0.5%F.S. | | 0.5% + 0.5%F.S. | |
| Dynamic Mode | | | | |
| Dynamic Mode | C.C. Mode | | C.C. Mode | |
| T1 & T2 | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | |
| Accuracy | 1μs/1ms+100ppm | | 1μs/1ms+100ppm | |
| Slew Rate | 0.16~40mA/μs | 1.6~400mA/μs | 0.002~0.5A/μs | 0.02~5A/μs |
| Resolution | 0.16mA/μs | 1.6mA/μs | 0.002A/μs | 0.02A/μs |
| Accuracy | 10% ± 20μs | | 10% ± 20μs | |
| Min. Rise Time | 24μs (Typical) | | 10μs (Typical) | |
| Current | 0~1A | 0~10A | 0~12A | 0~120A |
| Resolution | 0.25mA | 2.5mA | 3mA | 30mA |
| Accuracy | 0.4%F.S. | | 0.4%F.S. | |
| Measurement Section | | | | |
| Voltage Read Back | | | | |
| Range | 0~125V | 0~500V | 0~16V | 0~80V |
| Resolution | 2mV | 8mV | 0.25mV | 1.25mV |
| Accuracy | 0.025% + 0.025%F.S. | | 0.025% + 0.025%F.S. | |
| Current Read Back | | | | |
| Range | 0~1A | 0~10A | 0~12A | 0~120A |
| Resolution | 0.016mA | 0.16mA | 0.1875mA | 1.875mA |
| Accuracy | 0.25mA | 2.5mA | 0.05% + 0.05%F.S. | |
| Power Read Back*2 | | | | |
| Range | 0~30W | 0~300W | 0~60W | 0~600W |
| Accuracy | 0.1% + 0.1%F.S. | | 0.1% + 0.1%F.S. | |
| Protective Section | | | | |
| Over Power Protection | Yes | | Yes | |
| Over Current Protection | Yes | | Yes | |
| Over Temperature Protection | Yes | | Yes | |
| Over Voltage Alarm*3 | Yes | | Yes | |
| General | | | | |
| Short Circuit | | | | |
| Current (CC) | - | ≅ 10A | - | ≅ 120A |
| Voltage (CV) | - | 0V | - | 0V |
| Resistance (CR) | - | ≅ 1.25 Ω | - | ≅ 0.0125 Ω |
| Power (CP) | - | ≅ 300W | - | ≅ 600W |
| Input Resistance (Load Off) | 100k Ω (Typical) | | 100k Ω (Typical) | |
| Temperature Coefficient | 100PPM/°C (Typical) | | 100PPM/°C (Typical) | |
| Power | Supply from 6334A Mainframe | | Supply from 6334A Mainframe | |
| Dimension (HxWxD) | 172x82x489.5mm / 6.8x3.2x19.3inch | | 172x164x489.5mm / 6.8x6.5x19.3inch | |
| Weight | 4.2 kg / 9.3 lbs | | 7.3 kg / 16.1 lbs | |
| Operating Range | 0~40°C | | 0~40°C | |
| EMC & Safety | CE | | CE | |

| SPECIFICATIONS-3 | | | | | |
|------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------|--------------------|
| Model | 63307A (30W & 250W) | | | 63308A | |
| Power | 30W | 30W | 250W | 60W | 600W |
| Current | 0~5A | 0~4A | 0~40A | 0~2A | 0~20A |
| Voltage*3 | 0~80V | | | 0~500V | |
| Min. Operation Voltage (DC) *1 (Typical) | 0.4V@2.5A 0.8V@5A | 0.4V@2A 0.8V@4A | 0.4V@20A 0.8V@40A | 1.0V@1A 2V@2A | 1.0V@10A 2V@20A |
| Constant Current Mode | | | | | |
| Range | 0~5A | 0~4A | 0~40A | 0~2A | 0~20A |
| Resolution | 1.25mA | 1mA | 10mA | 0.5mA | 5mA |
| Accuracy | 0.1%+0.1%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. |
| Constant Resistance Mode | | | | | |
| Range | 0.3 Ω ~1.2k Ω (30W/16V) 15 Ω ~60k Ω (30W/80V) | 0.0375 Ω ~150 Ω (250W/16V) 1.875 Ω ~7.5k Ω (250W/80V) | | 0.625 Ω ~2.5k Ω (600W/125V) 25 Ω ~100k Ω (600W/500V) | |
| Resolution*5 | 833μS (30W/16V) 16.67μS (30W/80V) | 6.667μS (250W/16V) 133μS (250W/80V) | | 400μS (600W/125V) 10μS (600W/500V) | |
| Accuracy | 1.2k Ω : 0.1S + 0.2% 60k Ω : 0.01S + 0.1% | 150 Ω : 0.1S + 0.2% 7.5k Ω : 0.01S + 0.1% | | 25k Ω : 50mS + 0.2% 100k Ω : 5mS + 0.1% | |
| Constant Voltage Mode | | | | | |
| Range | 0~80V | | | 0~500V | |
| Resolution | 20mV | | | 125mV | |
| Accuracy | 0.05% + 0.1%F.S. | | | 0.05% + 0.1%F.S. | |
| Constant Power Mode | | | | | |
| Range | 0~30W | 0~30W | 0~250W | 0~60W | 0~600W |
| Resolution | 7.5mW | 7.5mW | 62.5mW | 15mW | 150mW |
| Accuracy | 0.5% + 0.5%F.S. | | | 0.5% + 0.5%F.S. | |
| Dynamic Mode | | | | | |
| Dynamic Mode | C.C. Mode | | | C.C. Mode | |
| T1 & T2 | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | | | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | |
| Accuracy | 1μs/1ms+100ppm | | | 1μs/1ms+100ppm | |
| Slew Rate | 0.8~200mA/μs | 0.64~160mA/μs | 64~1600mA/μs | 0.32~80mA/μs | 3.2~800mA/μs |
| Resolution | 0.8mA/μs | 0.64mA/μs | 64mA/μs | 0.32mA/μs | 3.2mA/μs |
| Accuracy | 10% ± 20μs | | | 10% ± 20μs | |
| Min. Rise Time | 10μs (Typical) | | | 24μs (Typical) | |
| Current | 0~5A | 0~4A | 0~40A | 0~2A | 0~20A |
| Resolution | 1.25mA | 1mA | 10mA | 0.5mA | 5mA |
| Accuracy | 0.4%F.S. | | | 0.4%F.S. | |
| Measurement Section | | | | | |
| Voltage Read Back | | | | | |
| Range | 0~16V | 0~80V | 0~16V | 0~80V | 0~125V |
| Resolution | 0.25mV | 1.25mV | 0.25mV | 1.25mV | 2mV |
| Accuracy | 0.025% + 0.025%F.S. | | | 0.025% + 0.025%F.S. | |
| Current Read Back | | | | | |
| Range | 0~5A | 0~4A | 0~40A | 0~2A | 0~20A |
| Resolution | 0.078125mA | 0.0625mA | 0.625mA | 0.03125mA | 0.3125mA |
| Accuracy | 0.05% + 0.05%F.S. | | | 0.05% + 0.05%F.S. | |
| Power Read Back*2 | | | | | |
| Range | 0~30W | 0~30W | 0~250W | 0~60W | 0~600W |
| Accuracy | 0.1% + 0.1%F.S. | | | 0.1% + 0.1%F.S. | |
| Protective Section | | | | | |
| Over Power Protection | Yes | | | Yes | |
| Over Current Protection | Yes | | | Yes | |
| Over Temperature Protection | Yes | | | Yes | |
| Over Voltage Alarm*3 | Yes | | | Yes | |
| General | | | | | |
| Short Circuit | | | | | |
| Current (CC) | - | - | ≐ 40A | - | ≐ 20A |
| Voltage (CV) | - | - | 0V | - | 0V |
| Resistance (CR) | - | - | ≐ 0.0375 Ω | - | ≐ 0.625 Ω |
| Power (CP) | - | - | ≐ 250W | - | ≐ 600W |
| Input Resistance (Load Off) | 100k Ω (Typical) | | | | |
| Temperature Coefficient | 100PPM/°C (Typical) | | | | |
| Power | Supply from 6334A Mainframe | | | | |
| Dimension (HxWxD) | 172x82x489.5mm / 6.8x3.2x19.3inch | | | 172x164x489.5mm / 6.8x6.5x19.3inch | |
| Weight | 4.5 kg / 9.9 lbs | | | 7.3 kg / 16.1 lbs | |
| Operating Range | 0~40°C | | | | |
| EMC & Safety | CE | | | | |

Battery Test & Automation Solution
 Photovoltaic Test & Automation Solution
 Semiconductor/IC Test Solution
 Laser Diode Test Solution
 LED/Lighting Test Solution
 FPD Test Solution
 Video & Color Test Solution
 Optical Inspection Solution
 Power Electronics Test Solution
 Passive Component Test Solution
 Electrical Safety Test Solution
 General Purpose Test Solution
 Thermoelectric Test & Control Solution
 PXI Test & Measurement Solution
 Manufacturing Execution Systems Solution

| SPECIFICATIONS-4 | | | | |
|-----------------------------------------|-----------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------|---------------|
| Model | 63312A | | 63323A | |
| Power | 120W | 1200W | 350W | |
| Current | 0~24A | 0~240A | 0~7A | 0~70A |
| Voltage*3 | 0~80V | | 0~120V | |
| Min. Operation Voltage (DC)*1 (Typical) | 0.4V@12A | 0.4V@120A | 0.05V @ 3.5A | 0.3V @ 35A |
| | 0.8V@24A | 0.8V@240A | 0.1V @ 7A | 0.6V @ 70A |
| Constant Current Mode | | | | |
| Range | 0~24A | 0~240A | 0~7A | 0~70A |
| Resolution | 6mA | 60mA | 0.125mA | 1.25mA |
| Accuracy | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. | 0.1%+0.1%F.S. | 0.1%+0.2%F.S. |
| Constant Resistance Mode | | | | |
| Range | 6.25mΩ~25Ω (1200W/16V) 0.3125Ω~1.25kΩ (1200W/80V) | | 0.01Ω~150Ω (350W/24V)*4 2Ω~2kΩ (350W/120V) | |
| Resolution*5 | 40mS (1200W/16V) 80μS (1200W/80V) | | 1.33mS (350W/24V)*4 10μS (350W/120V) | |
| Accuracy | 25Ω: 0.8S+ 0.8% 1.25kΩ: 0.08S+ 0.2% | | 150Ω: 67mS + 0.1% 2kΩ: 5mS + 0.2% | |
| Constant Voltage Mode | | | | |
| Range | 0~80V | | 0~120V | |
| Resolution | 20mV | | 2mV | |
| Accuracy | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | |
| Constant Power Mode | | | | |
| Range | 0~120W | 0~1200W | 0~35W | 0~350W |
| Resolution | 30mW | 300mW | 2.5mW | 25mW |
| Accuracy | 0.5% + 0.5%F.S. | | 0.5% + 0.5%F.S. | |
| Dynamic Mode | | | | |
| Dynamic Mode | C.C. Mode | | C.C. MODE | |
| T1 & T2 | 0.025ms ~ 50ms / Res: 5μs 0.1ms ~ 500ms / Res: 25μs 10ms ~ 50s / Res: 2.5ms | | 0.025ms~50ms/Res: 5μs 0.1ms~500ms / Res: 25μs 10ms~50s / Res: 2.5ms | |
| Accuracy | 1μs/1ms+100ppm | | 1μs /1ms+100ppm | |
| Slew Rate | 0.004~1A/μs | 0.04~10A/μs | 0.001~0.25A/μs | 0.01~2.5A/μs |
| Resolution | 0.004A/μs | 0.04A/μs | 0.001A/μs | 0.01A/μs |
| Accuracy | 10% ± 20μs | | 10% ± 20μs | |
| Min. Rise Time | 10μs (Typical) | | 25μs (Typical) *6 | |
| Current | 0~24A | 0~240A | 0~7A | 0~70A |
| Resolution | 6mA | 60mA | 0.125mA | 1.25mA |
| Current Accuracy | 0.4%F.S. | | 0.1% F.S. | |
| Measurement Section | | | | |
| Voltage Read Back | | | | |
| Range | 0~16V | 0~80V | 0~24V | 0~120V |
| Resolution | 0.25mV | 1.25mV | 0.4mV | 2mV |
| Accuracy | 0.025% + 0.025%F.S. | | 0.025%+0.015% F.S. | |
| Current Read Back | | | | |
| Range | 0~24A | 0~240A | 0~7A | 0~70A |
| Resolution | 0.375mA | 3.75mA | 0.125mA | 1.25mA |
| Accuracy | 0.075% + 0.075%F.S. | | 0.04%+0.04% F.S. | |
| Power Read Back*2 | | | | |
| Range | 0~120W | 0~1200W | 0~35W | 0~350W |
| Accuracy | 0.1% + 0.1%F.S. | | 0.1%+0.1% F.S. | |
| Protective Section | | | | |
| Over Power Protection | Yes | | Yes | |
| Over Current Protection | Yes | | Yes | |
| Over Temperature Protection | Yes | | Yes | |
| Over Voltage Alarm*3 | Yes | | Yes | |
| General | | | | |
| Short Circuit | | | | |
| Current (CC) | - | ≅ 240A | - | ≅ 70A |
| Voltage (CV) | - | 0V | - | 0V |
| Resistance (CR) | - | ≅ 0.00625 Ω | - | ≅ 0.01 Ω |
| Power (CP) | - | ≅ 1200W | - | ≅ 350W |
| Input Resistance (Load Off) | 100kΩ (Typical) | | 800kΩ (Typical) | |
| Temperature Coefficient | 100PPM/°C (Typical) | | 100PPM/°C (Typical) | |
| Power | Supply from 6334A Mainframe | | Supply from 6334A Mainframe | |
| Dimension (HxWxD) | 172x329x495mm / 6.8x12.9x19.5inch | | 172x82x489.5mm / 6.8x3.2x19.3inch | |
| Weight | 14 kg / 30.8 lbs | | 4.2kg / 9.3 lbs | |
| Operating Range | 0~40°C | | 0~40°C | |
| EMC & Safety | CE | | CE | |

NOTE*1 : Low voltage operation, under 0.8 volt, is possible at correspondingly reduced current level. Operating temperature range is 0°C to 40°C. All specifications apply for 25°C ± 5°C, except as noted

NOTE*2 : Power F.S.=Vrange F.S. x Irange F.S.

NOTE*3 : When the operating voltage exceeds the rated voltage for 1.02 times, a warning will occur and if it exceeds 1.1 times of the rated voltage, it would cause permanent damage to the device.

NOTE*4 : Please refer to user's manual for detail specifications.

NOTE*5 : S (siemens) is the SI unit of conductance, equal to one reciprocal ohm.

NOTE*6 : The loading current should be 0.35A at least.

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| SPECIFICATIONS | | | | | | |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Model | 63310A (100Wx2) | | 63313A | | 63315A *3 | |
| Power | 100W | | 300W | | 300W | |
| Current | 0~0.6A | 0~2A | 0~5A | 0~20A | 0~2A | 0~10A |
| Voltage *1 | 0~500V | | 0~300V | | 0~600V | |
| Min. Operating Voltage | 6V@2A | | 4V@20A | | 2V@10A | |
| LED Mode | | | | | | |
| Range | Operating Voltage: 0~100V/0~500V R _d Coefficient : 0.001~1 V _F : 0~100V/0~500V Current : 0~2A R _d : 1Ω~1kΩ/10Ω~10kΩ | | Operating Voltage : 0~60V/0~300V R _d Coefficient : 0.001~1 V _F : 0~60V/0~300V LEDL @ CH : 0~60V- 0~20A (R _d : 0.05 Ω ~50 Ω) LEDL @ CL : 0~60V- 0~5A (R _d : 0.8 Ω ~800 Ω) LEDH @ CL : 0~300V- 0~5A (R _d : 4 Ω ~4k Ω) | | Operating Voltage : 0~60V/0~600V R _d Coefficient : 0.001~1 V _F : 0~60V/0~600V LEDL @ CH : 0~60V- 0~10A (R _d : 0.05 Ω ~50 Ω) LEDL @ CL : 0~60V- 0~2A (R _d : 1.6 Ω ~1.6k Ω) LEDH @ CL : 0~600V- 0~2A (R _d : 8 Ω ~8k Ω) | |
| Resolution *2 | V _o : 4mV/20mV I _o : 0.1mA R _d Coefficient : 0.001 R _d : 62.5μS/6.25μS V _F : 4mV/20mV | | V _o : 1.2mV/6mV I _o : 100μA/400μA R _d Coefficient : 0.001 R _d : 400μS / 25μS / 5μS V _F : 1.2mV/ 6mV | | V _o : 1.2mV/6mV I _o : 100μA/400μA R _d : 0.4mS/12.5uS/2.5uS V _F : 6mV/ 30mV | |
| Constant Resistance Mode | | | | | | |
| Range | CRL : 3Ω~1kΩ (100W/100V) CRH : 10Ω~10kΩ (100W/500V) | | CRL @ CH : 0.2Ω~200Ω (300W/60V) CRL @ CL : 0.8Ω~800Ω (300W/60V) CRH @ CL : 4Ω~4kΩ (300W/300V) | | CRL @ CH : 0.4Ω~400Ω (300W/60V) CRL @ CL : 1.6Ω~1.6kΩ (300W/60V) CRH @ CL : 8Ω~8kΩ (300W/600V) | |
| Resolution*2 | CRL : 62.5μS CRH : 6.25μS | | CRL @ CH : 100μS CRL @ CL : 25μS CRH @ CL : 5μS | | CRL @ CH : 50μS CRL @ CL : 12.5μS CRH @ CL : 2.5μS | |
| Accuracy | 1kΩ : 4mS+0.2% 10kΩ : 1mS+0.1% | | 0.2% (setting + range) | | 0.2% (setting + range) | |
| Constant Voltage Mode | | | | | | |
| Range | 0~500V | | 0~300V | | 0~600V | |
| Resolution | 20mV | | 6mV | | 12mV | |
| Accuracy | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | | 0.05% + 0.1%F.S. | |
| Constant Current Mode | | | | | | |
| Range | 0~0.6A | 0~2A | 0~5A | 0~20A | 0~2A | 0~10A |
| Resolution | 12μA | 40μA | 100μA | 400μA | 40μA | 200μA |
| Accuracy | 0.1%+0.1% F.S. | | 0.1%+0.1% F.S. | 0.1%+0.2% F.S. | 0.1%+0.1% F.S. | 0.1%+0.2% F.S. |
| Measurement Section | | | | | | |
| Voltage Read Back | | | | | | |
| Range | 0~100V | 0~500V | 0~60V | 0~300V | 0~60V | 0~600V |
| Resolution | 2mV | 10mV | 1.2mV | 6mV | 1.2mV | 12mV |
| Accuracy | 0.025%+0.025% F.S. | | 0.025%+0.025% F.S. | | 0.025%+0.025% F.S. | |
| Current Read Back | | | | | | |
| Range | 0~0.6A | 0~2A | 0~5A | 0~20A | 0~2A | 0~10A |
| Resolution | 12μA | 40μA | 100μA | 400μA | 0.04mA | 0.2mA |
| Accuracy | 0.05%+0.05% F.S. | | 0.05%+0.05% F.S. | | 0.05%+0.05% F.S. | |

Note*1 : If the operating voltage exceeds 1.1 times of the rated voltage, it would cause permanent damage to the device.

Note*2 : S (siemens) is the SI unit of conductance, equal to one reciprocal ohm.

Note*3 : Call for availability

| Mainframe Model | 6332A | 6334A |
|-----------------------|--------------------------------------------------------------------------------------------------|-------|
| Number of slots | 2 | 4 |
| Operating Temperature | 0~40°C | |
| Input Rating | 1Ø 100/200Vac ± 10% V _{LN} , 47~63Hz ; 1Ø 115/230Vac ± 10% V _{LN} , 47~63Hz | |
| Dimension (HxWxD) | 194x275x550mm / 7.6x10.8x21.7inch | |
| Weight | 15 kg / 33.1 lbs | |
| | 21.5 kg / 47.4 lbs | |

ORDERING INFORMATION

6332A: Mainframe for 2 Load Modules

6334A: Mainframe for 4 Load Modules

63301A: Load Module 80V/40A/200W

63302A: Load Module 80V/20A/100W x 2

63303A: Load Module 80V/60A/300W

63305A: Load Module 500V/10A/300W

63306A: Load Module 80V/120A/600W

63307A: Load Module 80V/5A & 40A/30W & 250W

63308A: Load Module 500V/20A/600W

63312A: Load Module 80V/240A/1200W

63323A: Load Module 120V/70A/350W

A631000: GPIB Interface for Model 6334A/6332A Mainframe

A631001: Remote Controller

A631003: USB Interface for Model 6334A/6332A Mainframe

A631005: Softpanel for 6310A/6330A series

A631006: Rack Mounting Kit for Model 6332A Mainframe

A631007: Rack Mounting Kit for Model 6334A Mainframe

A632004: Sync. Link Box for 6330A/63200 Series

A800042: Test Fixture

LED Load Simulator for LED Driver Test

63310A: Load Module 500V/2A/100W x 2

63313A: Load Module 300V/20A/300W

* **63315A**: Load Module 600V/10A/300W

* Call for availability

