instrumentos de medida

High Accuracy | High Power Density | Battery Discharge

PROGRAMMABLE DC ELECTRONIC LOAD MODEL 63200E SERIES

The 63200E series are high power DC loads that include a choice of three operating voltages, 150V, 600V and 1,200V, with power levels from 2kW to 24kW and up to 2,000A in a single unit. Power levels can increase up to 240kW when multiple units are paralleled. These high power loads are designed for testing a wide range of EV products including DC charging stations, car battery discharge, on board charger power components, and other power electronics components. With its high power capabilities, parallel control and dynamic synchronization functions make this load ideal for automotive batteries, fuel cells and more.

The 63200E load's master/slave control application enables units with the same voltage specification to be used in parallel and synchronized dynamically to meet the power testing requirements. In addition, a 255-set data storage function has been built-in for recall of the stored settings at any time. When used in automated testing, the save and recall functions can save a great deal of time.

Each model of the 63200E series has precision and real time voltage and current measurements. As short circuit testing is critical to power and automated testing, the 63200E includes short circuit simulation to effectively solve these application demands.

With the vacuum florescent display (VFD) and rotary knob, the 63200E series loads offer versatile front panel operation. For remote operation, users are able to control the 63200E via standard USB or optional Ethernet/LXI and GPIB interfaces.

The embedded PWM fan speed control reduces noise caused by fans. The 63200E series also has overcurrent, overpower, and over temperature protections as well as over voltage and polarity reverse alarms to improve product reliability. These DC loads are reliable, precision instruments ideal design validation testing and automated test system integration.

Ethernet LXI | GPIB | USB | CE | RoHS2 Compliant

MODEL 63200E SERIES

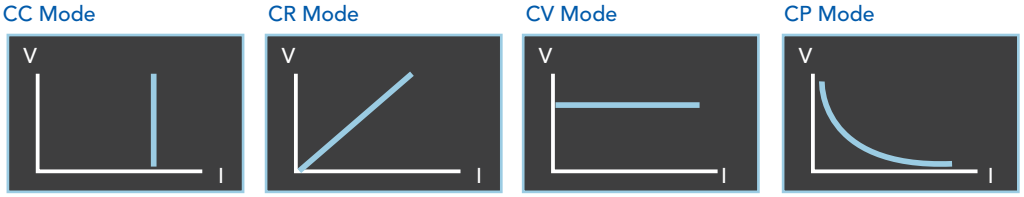
KEY FEATURES

- Rated power: 2kW, 3kW, 4kW, 5kW, 6kW, 8kW, 10kW, 12kW, 15kW, 18kW, 20kW, 24kW
- Voltage range: 150V, 600V, 1200V
- Current range: 2000A max.
- CC, CR, CV & CP operation modes
- Up to 10 units master/slave parallel control
- Synchronous control in static and dynamic loads
- CZ mode for turn on capacitive load simulation
- Real time power supply load transient response simulation & Vpk+/- measurement
- User programmable 255 sequential front panel input status
- Ultra-precision voltage & current measurement
- Timing & discharging measurement for batteries
- Short circuit simulation
- Smart fan control
- Full protection: OC (adjustable), OT, OP (adjustable) protection & OV warning, polarity reverse alarm
- Standard USB, optional Ethernet/LXI and GPIB interfaces

Chroma

APPLICATION OF BASIC LOADS

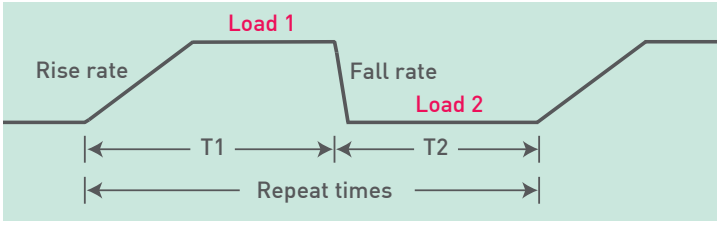
The 63200E series electronic loads operate in constant voltage, current, resistance, and power or impedance modes to satisfy a wide range of test requirements. For example, the CC and CR modes can ensure that the UUT voltage outputs remain stable when the load varies. For battery chargers or charging stations, CV mode can change the output voltage to ensure the charging current is precise. When the UUT is a battery, the electronic load changes to simulate device loading behavior. Many battery discharge applications and power consumption profiles can be simulated for analysis, making the CP mode the best choice for simulating electronic device loads.

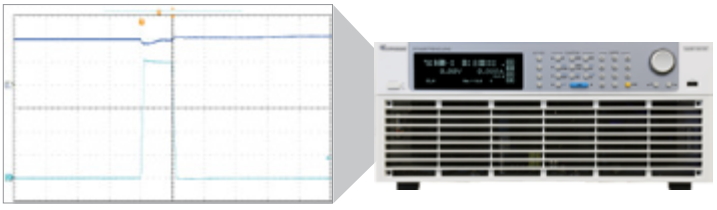


DYNAMIC LOAD

New designs of electronic devices operate at very high speeds and demand rapid transient response characteristics. To address these applications, the 63200E series offers high speed and programmable dynamic loading for testing. The figure shown below exhibits the programmable parameters such as current high/low level, T1/T2, rise/fall rate and execution times. As the load current continuously changes, the internal monitoring mechanism and line circuit can minimize the current waveform distortion with the dynamic change up to 5 kHz.

The dynamic mode provides a unique simulation capability allowing users to set the number of times each cycle repeats from 1~65535. This feature is suitable for peak current testing of fuses, on/off switches, coaxial cables, relays and batteries.

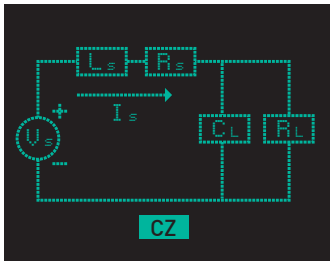


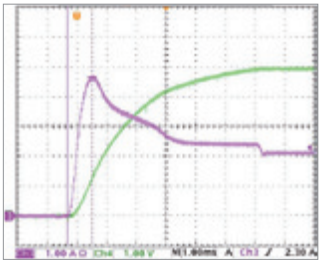


Pulse current

CZ MODE

A motherboard can contain many capacitors. To avoid charging the motherboard capacitors when the server powers on with surge current triggering the power supply over current protection mechanism making the power supply fail to turn on successfully, the power supply requires conducting a turn on capacitive load test. The 63200E series provides CZ mode for turn on capacitive load simulation to tackle this testing demand.



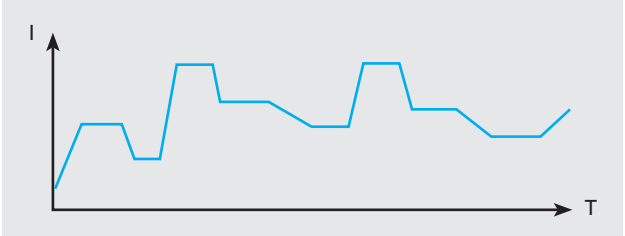


CZ mode is different from the CC and CP loading modes, as it simulates the actual inductance, impedance and capacitance for loading. Therefore, the load current is closer to the real situation. This is a voltage and current waveform simulation of the switching power supply in the turn on capacitive load test.

PROGRAMMABLE LOAD TIMING

The 63200E series electronic load has 255 programmable timings built-in for various load condition simulations. Repeat loading can be done in a single sequence or all sequences. The minimum time of a sequence is 100ms and the resolution is 100ms. Following lists the applications for common programmed sequences.

1. Battery discharge (electric car, and electric locomotive, etc.) simulating various dynamic load current waveforms, providing two levels above dynamic current simulation or one shot load simulation. (For single channel output UUT)
2. Power supply mixed load modulation. (For multichannel output UUT)
3. Load simulation for fuel cell life cycle testing.



USER-DEFINED HOT KEY DESIGN

The 63200E provides 4 sets of user-defined hot keys that enable the user to enter the operation mode quickly. To change the hot key's definition, simply press it for 2 seconds.

ULTRA HIGH POWER DENSITY

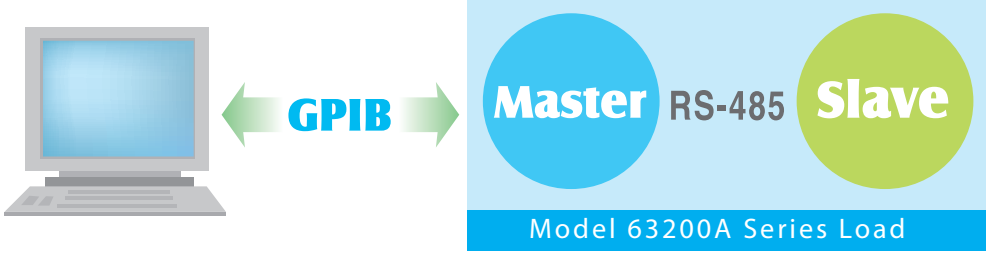
The 63200E series have 36 models in total with 5 types of heights, 12 types of powers and 3 types of voltages. Its world leading ultrahigh power density design upends the concept of oversize and difficult moving high power electronic loads. It saves plenty of room and solves space issues when upgrading the electronic load in an automated test system.

3 RANGES AND HIGH PRECISION MEASUREMENT

The 63200E series provides three operating current ranges and a built-in highly precision A/D converter, achieving 0.02%+0.02%F.S., 0.1%+0.1%F.S. and 0.1%+0.1%F.S. accuracy for voltage, current and power measurement respectively. Precise measurements like these are ideal for testing power efficiency and other critical parameters of the UUT.

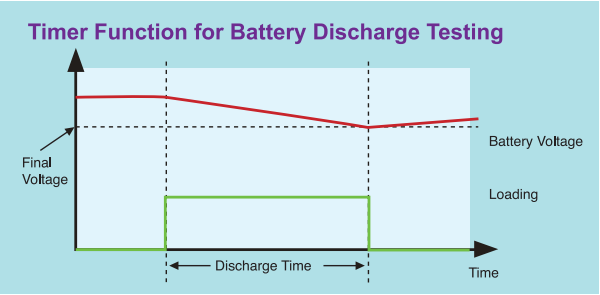
MASTER/SLAVE PARALLEL CONTROL

When increased power is required, two or more loads can be run in parallel to achieve the desired load current. The 63200E provides the user with smart Master/ Slave mode controls which enables the user to program the load currents of the Master and have them automatically calculated and downloaded to the slave loads. Using several loads in parallel to emulate a single load dramatically simplifies the operation. All models of the series can be integrated into a 19" width standard rack to save space. The 63200E can be controlled and reconfigured with automated testing applications via standard USB or optional Ethernet/LXI and GPIB interfaces.



BATTERY DISCHARGE TESTING

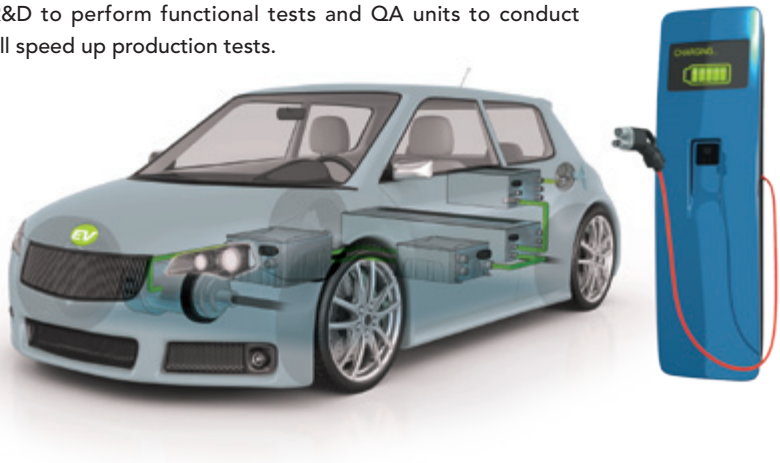
The 63200E has three discharge modes: CC, CR and CP. The electronic load can set cut off voltage and time (1~100,000 sec.) to stop loading correctly and make sure the battery is not damaged due to over discharge. In addition, it can measure the battery discharge power (WH, AH) and total discharge time. For example, when Load ON is pressed, the 63200E internal clock will start counting until the battery voltage is dropped to cut off voltage or Load OFF is pressed. The battery discharge test can also apply to super capacitor for discharge time testing.



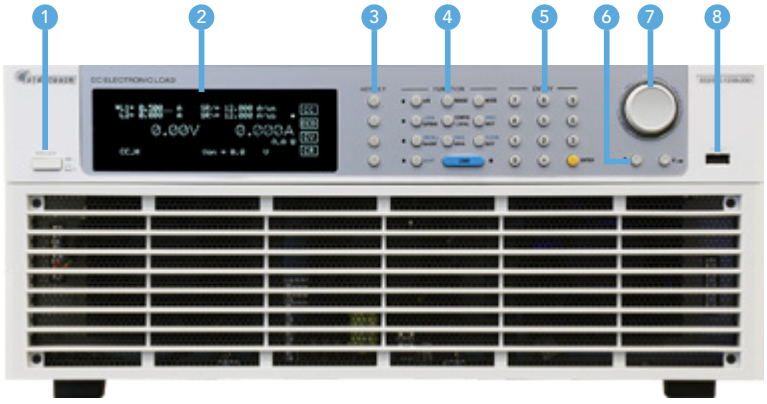
DC CHARGING STATIONS AND ON BOARD CHARGER TESTING

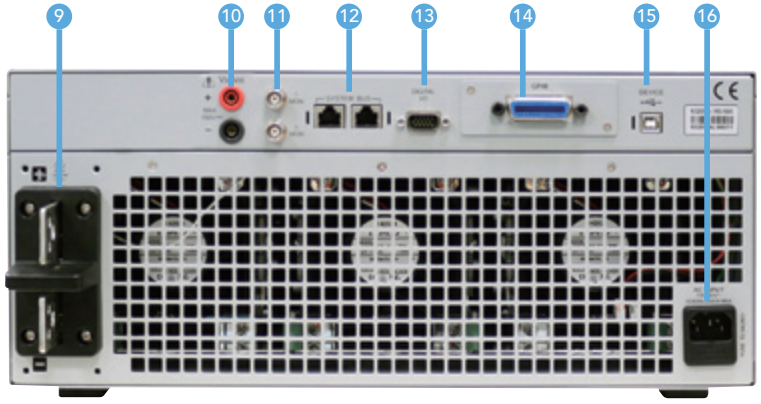
In the EV market, the DC charging station is an indispensable device. The 63200E series loads have models ranging from 2kW to 24kW and up to 2,000A operating voltage that are built to provide enough modes and functions for DC charging station functionality tests. Not only will these loads help R&D to perform functional tests and QA units to conduct verification tests, if integrated into an automated system, it will speed up production tests.

For on board charger testing, the 63200E can also be used to simulate the battery. When the on board charger starts charging the battery in current mode (CC), the 63200E can be set to voltage mode (CV) for loading. When the on board charger is performing floating charge on the batteries in voltage mode (CV), the 63200E has to change to current mode (CC) mode for loading.



PANEL DESCRIPTION





1. Power Switch : Electronic load AC power switch
2. VFD (Vacuum Fluorescent Display) : Setup information display
3. Setup information display : Loading mode switch
4. Function Keys : Including A/B key, RANGE, MODE, EXTEND, LOCK, COFIG./LOCAL, EDIT, SPEC, SHORT, RECALL, ADVA, SAVE & CLEAR
5. ENTRY Keys : Numerical keys and ENTER key
6. Arrow Keys : Changing and selecting menu
7. Changing and selecting menu : Editing parameter setup page, push the knob again to confirm the input value when the setting is done
8. USB HOST : For user defined waveform and programmed sequencedata download as well as firmware upgrade
9. Load Positive/Negative Terminal
10. Remote Sense Connections
11. Analog Outputs : Proportional voltage and current waveforms
12. System BUS : For master/slave system data transmission
13. System I/O : For system input/output signal control
14. GPIB & Ethernet Card Slot
15. USB Port
16. AC Input Connector

SPECIFICATIONS-1 (150V)

150V Models	63202E-150-200			63203E-150-300			63204E-150-400		
Voltage*2	0~150V			0~150V			0~150V		
Current	0~20A	0~100A	0~200A	0~30A	0~150A	0~300A	0~40A	0~200A	0~400A
Power*3	0~2,000W			0~3,000W			0~4,000W		
Static Mode									
Min. Operating Voltage (DC)	1.5V @20A	1.5V @100A	1.5V @200A	1.5V @30A	1.5V @150A	1.5V @300A	0.18V @40A	0.9V @200A	1.8V @400A
Constant Current Mode									
Range	0~20A	0~100A	0~200A	0~30A	0~150A	0~300A	0~40A	0~200A	0~400A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.015Ω-150Ω (16V/2kW) 0.06Ω-600Ω (80V/2kW) 1.5Ω-3000Ω (150V/2kW)			0.01Ω-100Ω (16V/3kW) 0.04Ω-400Ω (80V/3kW) 1Ω-2000Ω (150V/3kW)			0.0075Ω-75Ω (16V/4kW) 0.03Ω-300Ω (80V/4kW) 0.75Ω-1500Ω (150V/4kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~200W	0~1,000W	0~2,000W	0~300W	0~1,500W	0~3,000W	0~400W	0~2,000W	0~4,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.2mA/μs~ 0.2A/μs	1mA/μs~ 1A/μs	2mA/μs~ 2A/μs	0.2mA/μs~ 0.3A/μs	1mA/μs~ 1.5A/μs	2mA/μs~ 3A/μs	0.4mA/μs~ 0.4A/μs	2mA/μs~ 2A/μs	4mA/μs~ 4A/μs
Resolution	0.2mA/μs	1mA/μs	2mA/μs	0.2mA/μs	1mA/μs	2mA/μs	0.5mA/μs	2mA/μs	5mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	160VA(max)			160VA(max)			200VA(max)		
Dimension (HxWxD)	132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			177 x 428 x 647 mm / 6.97 x 16.85 x 25.47 inch		
Weight	30kg / 66 lbs			30kg / 66 lbs			35kg / 77.2 lbs		

SPECIFICATIONS-2 (150V)

150V Models	63205E-150-500			63206E-150-600			63208E-150-800		
Voltage*2	0~150V			0~150V			0~150V		
Current	0~50A	0~250A	0~500A	0~60A	0~300A	0~600A	0~80A	0~400A	0~800A
Power*3	0~5,000W			0~6,000W			0~8,000W		
Static Mode									
Min. Operating Voltage (DC)	0.15V @50A	0.75V @250A	1.5V @500A	0.18V @60A	0.9V @300A	1.8V @600A	0.18V @80A	0.9V @400A	1.8V @800A
Constant Current Mode									
Range	0~50A	0~250A	0~500A	0~60A	0~300A	0~600A	0~80A	0~400A	0~800A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.005Ω~50Ω (16V/5kW) 0.02Ω~200Ω (80V/5kW) 0.5Ω~1,000Ω (150V/5kW)			0.005Ω~50Ω (16V/6kW) 0.02Ω~200Ω (80V/6kW) 0.5Ω~1,000Ω (150V/6kW)			0.0038Ω~37.5Ω (16V/8kW) 0.015Ω~150Ω (80V/8kW) 0.375Ω~750Ω (150V/8kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~500W	0~2,500W	0~5,000W	0~600W	0~3,000W	0~6,000W	0~800W	0~4,000W	0~8,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.5mA/μs~ 0.5A/μs	2mA/μs~ 2.5A/μs	5mA/μs~ 5A/μs	0.5mA/μs~ 0.6A/μs	2mA/μs~ 3A/μs	5mA/μs~ 6A/μs	1mA/μs~ 0.8A/μs	5mA/μs~ 4A/μs	10mA/μs~ 8A/μs
Resolution	0.5mA/μs	2mA/μs	5mA/μs	0.5mA/μs	2mA/μs	5mA/μs	1mA/μs	5mA/μs	10mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	200VA(max)			200VA(max)			400VA(max)		
Dimension (HxWxD)	177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch		
Weight	35kg / 77.2 lbs			35kg / 77.2 lbs			70kg / 154.3 lbs		

• Continued on next page ➟

SPECIFICATIONS-3 (150V)

150V Models	63210E-150-1000			63212E-150-1200			63215E-150-1500		
Voltage*2	0~150V			0~150V			0~150V		
Current	0~100A	0~500A	0~1,000A	0~120A	0~600A	0~1,200A	0~150A	0~750A	0~1,500A
Power*3	0~10,000W			0~12,000W			0~15,000W		
Static Mode									
Min. Operating Voltage (DC)	0.15V @100A	0.75V @500A	1.5V @1,000A	0.18V @120A	0.9V @600A	1.8V @1,200A	0.18V @150A	0.9V @750A	1.8V @1,500A
Constant Current Mode									
Range	0~100A	0~500A	0~1,000A	0~120A	0~600A	0~1,200A	0~150A	0~750A	0~1,500A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.0025Ω~25Ω (16V/10kW) 0.01Ω~100Ω (80V/10kW) 0.25Ω~500Ω (150V/10kW)			0.0025Ω~25Ω (16V/12kW) 0.01Ω~100Ω (80V/12kW) 0.25Ω~500Ω (150V/12kW)			0.0017Ω~16.6667Ω (16V/15kW) 0.0067Ω~66.6667Ω (80V/15kW) 0.167Ω~333.334Ω (150V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,000W	0~5,000W	0~10,000W	0~1,200W	0~6,000W	0~12,000W	0~1,500W	0~7,500W	0~15,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	1mA/μs~ 1A/μs	5mA/μs~ 5A/μs	10mA/μs~ 10A/μs	1mA/μs~ 1.2A/μs	5mA/μs~ 6A/μs	10mA/μs~ 12A/μs	2mA/μs~ 1.5A/μs	10mA/μs~ 7.5A/μs	20mA/μs~ 15A/μs
Resolution	1mA/μs	5mA/μs	10mA/μs	1mA/μs	5mA/μs	10mA/μs	2mA/μs	10mA/μs	20mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	400VA(max)			400VA(max)			600VA(max)		
Dimension (HxWxD)	307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch		
Weight	70kg / 154.3 lbs			70kg / 154.3 lbs			97kg / 213.8 lbs		

SPECIFICATIONS-4 (150V)

150V Models	63218E-150-1800			63220E-150-2000			63224E-150-2000		
Voltage*2	0~150V			0~150V			0~150V		
Current	0~180A	0~900A	0~1,800A	0~200A	0~1,000A	0~2,000A	0~200A	0~1,000A	0~2,000A
Power*3	0~18,000W			0~20,000W			0~24,000W		
Static Mode									
Min. Operating Voltage (DC)	0.18V @180A	0.9V @900A	1.8V @1,800A	0.18V @200A	0.9V @1,000A	1.8V @2,000A	0.18V @200A	0.9V @1,000A	1.8V @2,000A
Constant Current Mode									
Range	0~180A	0~900A	0~1,800A	0~200A	0~1,000A	0~2,000A	0~200A	0~1,000A	0~2,000A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.0017Ω-16.6667Ω (16V/18kW) 0.0067Ω-66.6667Ω (80V/18kW) 0.167Ω-333.334Ω (150V/18kW)			0.0013Ω-12.5Ω (16V/20kW) 0.005Ω-50Ω (80V/20kW) 0.125Ω-250Ω (150V/20kW)			0.0013Ω-12.5Ω (16V/24kW) 0.005Ω-50Ω (80V/24kW) 0.125Ω-250Ω (150V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V	0~16V	0~80V	0~150V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,800W	0~9,000W	0~18,000W	0~2,000W	0~10,000W	0~20,000W	0~2,400W	0~12,000W	0~24,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	2mA/μs~ 1.8A/μs	10mA/μs~ 9A/μs	20mA/μs~ 18A/μs	2mA/μs~ 2A/μs	10mA/μs~ 10A/μs	20mA/μs~ 20A/μs	2mA/μs~ 2A/μs	10mA/μs~ 10A/μs	20mA/μs~ 20A/μs
Resolution	2mA/μs	10mA/μs	20mA/μs	2mA/μs	10mA/μs	80mA/μs	2mA/μs	10mA/μs	20mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	600VA(max)			800VA(max)			800VA(max)		
Dimension (HxWxD)	441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch		
Weight	97kg / 213.8 lbs			125kg / 275.6 lbs			125kg / 275.6 lbs		

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SPECIFICATIONS-5 (600V)

600V Models	63202E-600-140			63203E-600-210			63204E-600-280		
Voltage*2	0~600V			0~600V			0~600V		
Current	0~14A	0~70A	0~140A	0~21A	0~105A	0~210A	0~28A	0~140A	0~280A
Power*3	0~2,000W			0~3,000W			0~4,000W		
Static Mode									
Min. Operating Voltage (DC)	1.4V @14A	7V @70A	14V @140A	1.4V @21A	7V @105A	14V @210A	1.4V @28A	7V @140A	14V @280A
Constant Current Mode									
Range	0~14A	0~70A	0~140A	0~21A	0~105A	0~210A	0~28A	0~140A	0~280A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.15Ω~1,500Ω (80V/2kW) 0.6Ω~6,000Ω (150V/2kW) 6Ω~12,000Ω (600V/2kW)			0.1Ω~1,000Ω (80V/3kW) 0.4Ω~4,000Ω (150V/3kW) 4Ω~8,000Ω (600V/3kW)			0.075Ω~750Ω (80V/4kW) 0.3Ω~3,000Ω (150V/4kW) 3Ω~6,000Ω (600V/4kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~200W	0~1,000W	0~2,000W	0~300W	0~1,500W	0~3,000W	0~400W	0~2,000W	0~4,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.2mA/μs~ 0.14A/μs	1mA/μs~ 0.7A/μs	2mA/μs~ 1.4A/μs	0.2mA/μs~ 0.21A/μs	1mA/μs~ 1.05A/μs	2mA/μs~ 2.1A/μs	0.4mA/μs~ 0.28A/μs	2mA/μs~ 1.4A/μs	4mA/μs~ 2.8A/μs
Resolution	0.2mA/μs	1mA/μs	2mA/μs	0.2mA/μs	1mA/μs	2mA/μs	0.4mA/μs	2mA/μs	4mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	160VA(max)			160VA(max)			200VA(max)		
Dimension (HxWxD)	132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			177 x 428 x 647 mm / 6.97 x 16.85 x 25.47 inch		
Weight	30kg / 66 lbs			30kg / 66 lbs			35kg / 77.2 lbs		

SPECIFICATIONS-6 (600V)

600V Models	63205E-600-350			63206E-600-420			63208E-600-560		
Voltage*2	0~600V			0~600V			0~600V		
Current	0~35A	0~175A	0~350A	0~42A	0~210A	0~420A	0~56A	0~280A	0~560A
Power*3	0~5,000W			0~6,000W			0~8,000W		
Static Mode									
Min. Operating Voltage (DC)	1.4V @35A	7V @175A	14V @350A	1.4V @42A	7V @210A	14V @420A	1.4V @56A	7V @280A	14V @560A
Constant Current Mode									
Range	0~35A	0~175A	0~350A	0~42A	0~210A	0~420A	0~56A	0~280A	0~560A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.05Ω~500Ω (80V/5kW) 0.2Ω~2,000Ω (150V/5kW) 2Ω~4,000Ω (600V/5kW)			0.05Ω~500Ω (80V/6kW) 0.2Ω~2,000Ω (150V/6kW) 2Ω~4,000Ω (600V/6kW)			0.038Ω~375Ω (80V/8kW) 0.15Ω~1,500Ω (150V/8kW) 1.5Ω~3,000Ω (600V/8kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~500W	0~2,500W	0~5,000W	0~600W	0~3,000W	0~6,000W	0~800W	0~4,000W	0~8,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.4mA/μs~ 0.35A/μs	2mA/μs~ 1.75A/μs	4mA/μs~ 3.5A/μs	0.4mA/μs~ 0.42A/μs	2mA/μs~ 2.1A/μs	4mA/μs~ 4.2A/μs	0.5mA/μs~ 0.56A/μs	2mA/μs~ 2.8A/μs	5mA/μs~ 5.6A/μs
Resolution	0.4mA/μs	2mA/μs	4mA/μs	0.4mA/μs	2mA/μs	4mA/μs	0.5mA/μs	2mA/μs	5mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	200VA(max)			200VA(max)			400VA(max)		
Dimension (HxWxD)	177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch		
Weight	35kg / 77.2 lbs			35kg / 77.2 lbs			70kg / 154.3 lbs		

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SPECIFICATIONS-7 (600V)

600V Models	63210E-600-700			63212E-600-840			63215E-600-1050		
Voltage*2	0~600V			0~600V			0~600V		
Current	0~70A	0~350A	0~700A	0~84A	0~420A	0~840A	0~105A	0~525A	0~1,050A
Power*3	0~10,000W			0~12,000W			0~15,000W		
Static Mode									
Min. Operating Voltage (DC)	1.4V @70A	7V @350A	14V @700A	1.4V @84A	7V @420A	14V @840A	1.4V @105A	7V @525A	14V @1,050A
Constant Current Mode									
Range	0~70A	0~350A	0~700A	0~84A	0~420A	0~840A	0~105A	0~525A	0~1,050A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.025Ω~250Ω(80V/10kW) 0.1Ω~1,000Ω(150V/10kW) 1Ω~2,000Ω(600V/10kW)			0.025Ω~250Ω(80V/12kW) 0.1Ω~1,000Ω(150V/12kW) 1Ω~2,000Ω(600V/12kW)			0.017Ω~166.667Ω(80V/15kW) 0.067Ω~666.667Ω(150V/15kW) 0.67Ω~1,333.34Ω(600V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,000W	0~5,000W	0~10,000W	0~1,200W	0~6,000W	0~12,000W	0~1,500W	0~7,500W	0~15,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.5mA/μs~ 0.7A/μs	2.5mA/μs~ 3.5A/μs	5mA/μs~ 7A/μs	1mA/μs~ 0.84A/μs	5mA/μs~ 4.2A/μs	10mA/μs~ 8.4A/μs	1mA/μs~ 1.05A/μs	5mA/μs~ 5.25A/μs	10mA/μs~ 10.5A/μs
Resolution	0.5mA/μs	2.5mA/μs	5mA/μs	1mA/μs	5mA/μs	10mA/μs	1mA/μs	5mA/μs	10mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	400VA(max)			400VA(max)			600VA(max)		
Dimension (HxWxD)	307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch		
Weight	70kg / 154.3 lbs			70kg / 154.3 lbs			97kg / 213.8 lbs		

SPECIFICATIONS-8 (600V)

600V Models	63218E-600-1260			63220E-600-1400			63224E-600-1680		
Voltage*2	0~600V			0~600V			0~600V		
Current	0~126A	0~630A	0~1,260A	0~140A	0~700A	0~1,400A	0~168A	0~840A	0~1,680A
Power*3	0~18,000W			0~20,000W			0~24,000W		
Static Mode									
Min. Operating Voltage (DC)	1.4V @126A	7V @630A	14V @1,260A	1.4V @140A	7V @700A	14V @1,400A	1.4V @168A	7V @840A	14V @1,680A
Constant Current Mode									
Range	0~126A	0~630A	0~1,260A	0~140A	0~700A	0~1,400A	0~168A	0~840A	0~1,680A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.017Ω-166.667Ω (80V/18kW) 0.067Ω-666.667Ω (150V/18kW) 0.67Ω-1,333.34Ω (600V/18kW)			0.013Ω-125Ω (80V/20kW) 0.05Ω-500Ω (150V/20kW) 0.5Ω-1,000Ω (600V/20kW)			0.013Ω-125Ω (80V/24kW) 0.05Ω-500Ω (150V/24kW) 0.5Ω-1,000Ω (600V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V	0~80V	0~150V	0~600V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,800W	0~9,000W	0~18,000W	0~2,000W	0~10,000W	0~20,000W	0~2,400W	0~12,000W	0~24,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	1mA/μs~ 1.26A/μs	5mA/μs~ 6.3A/μs	10mA/μs~ 12.6A/μs	2mA/μs~ 1.4A/μs	10mA/μs~ 7A/μs	20mA/μs~ 14A/μs	2mA/μs~ 1.68A/μs	10mA/μs~ 8.4A/μs	20mA/μs~ 16.8A/μs
Resolution	1mA/μs	5mA/μs	10mA/μs	2mA/μs	10mA/μs	20mA/μs	2mA/μs	10mA/μs	20mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	600VA(max)			800VA(max)			800VA(max)		
Dimension (HxWxD)	441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch		
Weight	97kg / 213.8 lbs			125kg / 275.6 lbs			125kg / 275.6 lbs		

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SPECIFICATIONS-9 (1,200V)

1,200V Models	63202E-1200-80			63203E-1200-120			63204E-1200-160		
Voltage*2	0~1,200V			0~1,200V			0~1,200V		
Current	0~8A	0~40A	0~80A	0~12A	0~60A	0~120A	0~16A	0~80A	0~160A
Power*3	0~2,000W			0~3,000W			0~4,000W		
Static Mode									
Min. Operating Voltage (DC)	2V @8A	10V @40A	20V @80A	2V @12A	10V @60A	20V @120A	2V @16A	10V @80A	20V @160A
Constant Current Mode									
Range	0~8A	0~40A	0~80A	0~12A	0~60A	0~120A	0~16A	0~80A	0~160A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.3Ω-3kΩ(150V/2kW) 1.2Ω-12kΩ(600V/2kW) 30Ω-60kΩ(1,200V/2kW)			0.2Ω-2kΩ(150V/3kW) 0.8Ω-8kΩ(600V/3kW) 20Ω-40kΩ(1,200V/3kW)			0.15Ω-1.5kΩ(150V/4kW) 0.6Ω-6kΩ(600V/4kW) 15Ω-30kΩ(1,200V/4kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~200W	0~1,000W	0~2,000W	0~300W	0~1,500W	0~3,000W	0~400W	0~2,000W	0~4,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.1mA/μs~ 0.08A/μs	0.5mA/μs~ 0.4A/μs	1mA/μs~ 0.8A/μs	0.1mA/μs~ 0.12A/μs	0.5mA/μs~ 0.6A/μs	1mA/μs~ 1.2A/μs	0.2mA/μs~ 0.16A/μs	1mA/μs~ 0.8A/μs	2mA/μs~ 1.6A/μs
Resolution	0.1mA/μs	0.5mA/μs	1mA/μs	0.1mA/μs	0.5mA/μs	1mA/μs	0.2mA/μs	1mA/μs	2mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	160VA(max)			160VA(max)			200VA(max)		
Dimension (HxWxD)	132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			132.5 x 428 x 647mm / 5.22 x 16.85 x 25.47 inch			177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch		
Weight	30kg / 66 lbs			30kg / 66 lbs			35kg / 77.2 lbs		

SPECIFICATIONS-10 (1,200V)

1,200V Models	63205E-1200-200			63206E-1200-240			63208E-1200-320		
Voltage*2	0~1,200V			0~1,200V			0~1,200V		
Current	0~20A	0~100A	0~200A	0~24A	0~120A	0~240A	0~32A	0~160A	0~320A
Power*3	0~5,000W			0~6,000W			0~8,000W		
Static Mode									
Min. Operating Voltage (DC)	2V @20A	10V @100A	20V @200A	2V @24A	10V @120A	20V @240A	2V @32A	10V @160A	20V @320A
Constant Current Mode									
Range	0~20A	0~100A	0~200A	0~24A	0~120A	0~240A	0~32A	0~160A	0~320A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.1Ω-1kΩ(150V/5kW) 0.4Ω-4kΩ(600V/5kW) 10Ω-20kΩ(1200V/5kW)			0.1Ω-1kΩ(150V/6kW) 0.4Ω-4kΩ(600V/6kW) 10Ω-20kΩ(1200V/6kW)			0.075Ω-0.75kΩ(150V/8kW) 0.3Ω-3kΩ(600V/8kW) 7.5Ω-15kΩ(1200V/8kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~500W	0~2,500W	0~5,000W	0~600W	0~3,000W	0~6,000W	0~800W	0~4,000W	0~8,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.2mA/μs~ 0.2A/μs	1mA/μs~ 1A/μs	2mA/μs~ 2A/μs	0.2mA/μs~ 0.24A/μs	1mA/μs~ 1.2A/μs	2mA/μs~ 2.4A/μs	0.4mA/μs~ 0.32A/μs	2mA/μs~ 1.6A/μs	4mA/μs~ 3.2A/μs
Resolution	0.2mA/μs	1mA/μs	2mA/μs	0.2mA/μs	1mA/μs	2mA/μs	0.4mA/μs	2mA/μs	4mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	200VA(max)			200VA(max)			400VA(max)		
Dimension (HxWxD)	177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			177 x 428 x 647mm / 6.97 x 16.85 x 25.47 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch		
Weight	35kg / 77.2 lbs			35kg / 77.2 lbs			70kg / 154.3 lbs		

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SPECIFICATIONS-11 (1,200V)

1,200V Models	63210E-1200-400			63212E-1200-480			63215E-1200-600		
Voltage*2	0~1,200V			0~1,200V			0~1,200V		
Current	0~40A	0~200A	0~400A	0~48A	0~240A	0~480A	0~60A	0~300A	0~600A
Power*3	0~10,000W			0~12,000W			0~15,000W		
Static Mode									
Min. Operating Voltage (DC)	2V @40A	10V @200A	20V @400A	2V @48A	10V @240A	20V @480A	2V @60A	10V @300A	20V @600A
Constant Current Mode									
Range	0~40A	0~200A	0~400A	0~48A	0~240A	0~480A	0~60A	0~300A	0~600A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.05Ω~0.5kΩ(150V/10kW) 0.2Ω~2kΩ(600V/10kW) 5Ω~10kΩ(1,200V/10kW)			0.05Ω~0.5kΩ(150V/12kW) 0.2Ω~2kΩ(600V/12kW) 5Ω~10kΩ(1,200V/12kW)			0.034Ω~0.333334kΩ(150V/15kW) 0.14Ω~1.33334kΩ(600V/15kW) 3.34Ω~6.66667kΩ(1,200V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,000W	0~5,000W	0~10,000W	0~1,200W	0~6,000W	0~12,000W	0~1,500W	0~7,500W	0~15,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.1mA/μs~ 0.4A/μs	0.5mA/μs~ 2A/μs	1mA/μs~ 4A/μs	0.1mA/μs~ 0.48A/μs	0.5mA/μs~ 2.4A/μs	1mA/μs~ 4.8A/μs	0.2mA/μs~ 0.6A/μs	1mA/μs~ 3A/μs	2mA/μs~ 6A/μs
Resolution	0.4mA/μs	2mA/μs	4mA/μs	0.4mA/μs	2mA/μs	4mA/μs	0.5mA/μs	2mA/μs	5mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	400VA(max)			400VA(max)			600VA(max)		
Dimension (HxWxD)	307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			307.6 x 428 x 670.5 mm / 12.11 x 16.85 x 26.40 inch			441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch		
Weight	70kg / 154.3 lbs			70kg / 154.3 lbs			97kg / 213.8 lbs		

SPECIFICATIONS-12 (1,200V)

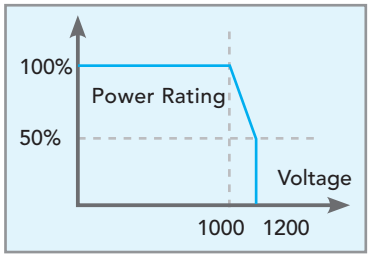
1,200V Models	63218E-1200-720			63220E-1200-800			63224E-1200-960		
Voltage*2	0~1,200V			0~1,200V			0~1,200V		
Current	0~72A	0~360A	0~720A	0~80A	0~400A	0~800A	0~96A	0~480A	0~960A
Power*3	0~18,000W			0~20,000W			0~24,000W		
Static Mode									
Min. Operating Voltage (DC)	2V @72A	10V @360A	20V @720A	2V @80A	10V @400A	20V @800A	2V @96A	10V @480A	20V @960A
Constant Current Mode									
Range	0~72A	0~360A	0~720A	0~80A	0~400A	0~800A	0~96A	0~480A	0~960A
Accuracy*4	0.1%+0.1%F.S.			0.1%+0.1%F.S.			0.1%+0.1%F.S.		
Constant Resistance Mode									
Range	0.034Ω~0.333334kΩ(150V/18kW) 0.14Ω~1.33334kΩ(600V/18kW) 3.34Ω~6.66667kΩ(1,200V/18kW)			0.025Ω~0.25kΩ(150V/20kW) 0.1Ω~1kΩ(600V/20kW) 2.5Ω~5kΩ(1,200V/20kW)			0.025Ω~0.25kΩ(150V/24kW) 0.1Ω~1kΩ(600V/24kW) 2.5Ω~5kΩ(1,200V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.			Vin/Rset*(0.2%)+0.2% IF.S.		
Constant Voltage Mode									
Range	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V	0~150V	0~600V	0~1,200V
Accuracy	0.05%+0.025%F.S.			0.05%+0.025%F.S.			0.05%+0.025%F.S.		
Constant Power Mode									
Range	0~1,800W	0~9,000W	0~18,000W	0~2,000W	0~10,000W	0~20,000W	0~2,400W	0~12,000W	0~24,000W
Accuracy *5	0.2%+0.2%F.S.			0.2%+0.2%F.S.			0.2%+0.2%F.S.		
Dynamic Mode									
Slew rate	0.2mA/μs~ 0.72A/μs	1mA/μs~ 3.6A/μs	2mA/μs~ 7.2A/μs	0.2mA/μs~ 0.8A/μs	1mA/μs~ 4A/μs	2mA/μs~ 8A/μs	0.4mA/μs~ 0.96A/μs	2mA/μs~ 4.8A/μs	4mA/μs~ 9.6A/μs
Resolution	0.5mA/μs	2mA/μs	5mA/μs	1mA/μs	5mA/μs	10mA/μs	1mA/μs	5mA/μs	10mA/μs
Accuracy	5% ± 10μs			5% ± 10μs			5% ± 10μs		
Others									
Power Consumption	600VA(max)			800VA(max)			800VA(max)		
Dimension (HxWxD)	441.1 x 428 x 670.5 mm / 17.37 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch			574.6 x 428 x 670.5 mm / 22.64 x 16.85 x 26.40 inch		
Weight	97kg / 213.8 lbs			125kg / 275.6 lbs			125kg / 275.6 lbs		

• Continued on next page ➟

GENERAL SPECIFICATIONS

Voltage	150V	600V	1200V
Static mode			
CZ			
Range	CL : 30μF~50,000μF RL : as CR Ls : 0.1μH~16μH Rs : 30mΩ~20Ω		
Resolution	CL : 1μF Ls : 0.1μH Rs : 1mΩ RL : as CR		
Dynamic mode			
T1 & T2	0.020~99.999ms/100ms~99,999ms		
Resolution	1μs/1ms		
Accuracy	1μs+100ppm		
Min. rise time *7	100μs (Typical)	100μs (Typical)	100μs (Typical)
Measurement			
Voltage read back			
Range *8	0 ~ rated voltage (three ranges)		
Accuracy	0.02%+0.02%F.S.		
Current read back			
Range	0 ~ rated current (three ranges)		
Accuracy	0.1%+0.1%F.S.		
Power read back			
Range	0 ~ rated power (three ranges)		
Accuracy *5	0.1%+0.1%F.S.		
Battery Discharge			
Range	1s~100,000s		
Resolution	1s		
Monitor			
Voltage Monitor			
Bandwidth	20kHz		
Range	0~150V	0~600V	0~1200V
Output	0~10V		
Accuracy	0.5%F.S.		
Output impedance	10kΩ		
Resolution	4mV		
Current Monitor			
Bandwidth	20kHz		
Range	0 ~ rated current		
Output	0~10V		
Accuracy	0.5%F.S.		
Output impedance	10kΩ		
Resolution	4mV		
Protection			
Over Current	Yes (Settable)		
Over Power	Yes (Settable)		
Over Temperature	Yes		
Over Voltage Alarm	Yes		
Reverse Alarm	Yes		
Interface			
Front USB (Host)	Standard		
Rear USB (Device)	Standard		
GPIB	Optional		
System Bus	Master/Slave		
General			
Input Resistance (Load Off)	800kΩ (Typical)	1MΩ (Typical)	2MΩ (Typical)
Operating Temp	0~40°C		
Storage Temp	-20~80°C		
Line Voltage	100~240 VAC / 47~63Hz		

1. The specifications are guaranteed to meet specified performance at temperature range of 25±5°C.
2. If the operating voltage exceeds the rated voltage for 1.05 times, it would cause permanent damage to the device.
3. The power rating specifications at ambient temperature = 25°C.
4. If the operating current is below range 0.2%, the accuracy specification is 0.1% F.S.
5. Power F.S. = Vrange F.S.x Irang F.S.
6. The specification is valid only for loading current > 4% F.S.
7. The short circuit function simulates full power loading and thus it cannot perform mechanical short circuit.
8. Example : 63200E-1200-400, the voltage ranges are 150V, 600V, and 1,200V.



* All specifications are subject to change without notice.

SOFTPANEL

Main menu

Dynamic load

Editing menu

Battery discharge

ORDERING INFORMATION

63200E Series Programmable DC Electronic Load				
Model	Voltage	Current	Power	Height
63202E-150-200*	150V	200A	2kW	3U
63203E-150-300		300A	3kW	
63204E-150-400		400A	4kW	4U
63205E-150-500		500A	5kW	
63206E-150-600		600A	6kW	
63208E-150-800		800A	8kW	7U
63210E-150-1000		1000A	10kW	
63212E-150-1200		1200A	12kW	
63215E-150-1500		1500A	15kW	10U
63218E-150-1800		1800A	18kW	
63220E-150-2000		2000A	20kW	13U
63224E-150-2000		2000A	24kW	
63202E-600-140*	600V	140A	2kW	3U
63203E-600-210		210A	3kW	
63204E-600-280		280A	4kW	4U
63205E-600-350		350A	5kW	
63206E-600-420		420A	6kW	
63208E-600-560		560A	8kW	7U
63210E-600-700		700A	10kW	
63212E-600-840		840A	12kW	
63215E-600-1050		1050A	15kW	10U
63218E-600-1260		1260A	18kW	
63220E-600-1400		1400A	20kW	13U
63224E-600-1680		1680A	24kW	

63200E Series Programmable DC Electronic Load				
Model	Voltage	Current	Power	Height
63202E-1200-80*	1200V	80A	2kW	3U
63203E-1200-120		120A	3kW	
63204E-1200-160		160A	4kW	4U
63205E-1200-200		200A	5kW	
63206E-1200-240		240A	6kW	
63208E-1200-320		320A	8kW	7U
63210E-1200-400		400A	10kW	
63212E-1200-480		480A	12kW	
63215E-1200-600		600A	15kW	10U
63218E-1200-720		720A	18kW	
63220E-1200-800		800A	20kW	13U
63224E-1200-960		960A	24kW	

Options	
A600009	GPIB cable (200cm)
A600010	GPIB cable (60cm)
A632012	Softpanel for 63200E Series
A636000	GPIB interface
A636010	Ethernet interface
B632000	Handle for 3U models (2kW/3kW)
B632001	Handle for 4U models (4kW/5kW/6kW)
B632002	Handle for 7U models (8kW/10kW/12kW)
B632003	Handle for 10U models (15kW/18kW)
B632004	Handle for 13U models (20kW/24kW)

* The 2kW will be available in June, 2017.

* The 63200E series models with the same voltage but different power can be controlled in parallel simply through the master and slave settings. Once multiple units are integrated into the rack, be sure to pay special attention to ventilation. The 63200E series can parallel up to 10 units with maximum power 240kW, and if there is a demand for power higher than 240kW, please contact your local sales representative.

instrumentos de medida

Septiembre, 31
28022 Madrid

Tel. 913000191

www.idm-instrumentos.es
idm@idm-instrumentos.es