

KEY FEATURES

- Rated power : 2kW, 3kW, 4kW, 5kW, 6kW, 8kW, 10kW, 12kW, 15kW, 18kW, 20kW, 24kW
- Voltage range: 150V, 600V, 1200V
- Current range: 2,000A max. per unit
- CC, CR, CV & CP operation modes
- Up to 10 units master/slave parallel control, max. 240kW (parallel)
- Dynamic 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
- High 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
- Standard USB, optional Ethernet/LXI & GPIB interfaces

The 63200E series have three operating voltage choices, 150V, 600V & 1,200V, with models covering power levels from 2kW to 24kW and up to 2,000A in a single unit.

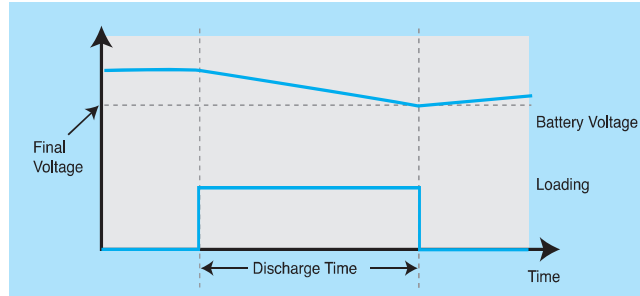
The 63200E series high power DC electronic loads are designed for testing a wide range of power conversion products including AC/DC and server power supplies, DC/DC converters, EV batteries, automotive charging stations, and other power electronics components.

Another distinct feature is the dynamic auto-frequency sweep function, which enables detecting a UUTs worst case output deviation across a wide range of current frequencies. In addition, a 255-set of data storage function has been built in for recall of the stored settings at any time. For automated testing, the save and recall functions can save a great deal of time.

The 63200E series also have overcurrent, overpower, and over temperature protections as well as over voltage and polarity reverse alarms to enhance product reliability. These DC loads are reliable products for engineering testing and automated test system's integration.

Battery Discharge Testing

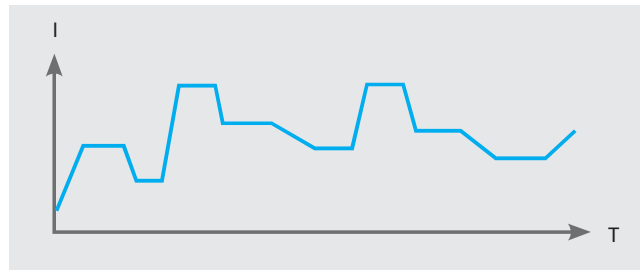
The 63200E has three discharge modes: CC, CR and CP. The electronic load can set cut off voltage and time (1~100,000 sec.) to stop loading correctly and make sure the battery is not damaged due to over discharge. In addition it can measure the battery discharge power (WH, AH) and total discharge time.



Timer function for battery discharge testing

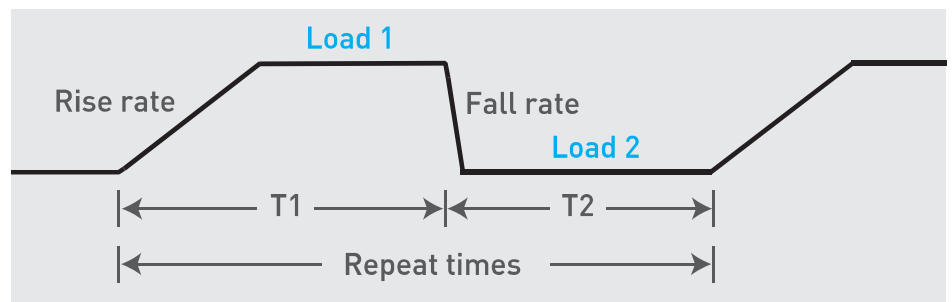
Programmable Load Timing

The 63200E series electronic load has built in 255 programmable timings for various loading conditions simulation. Following lists the applications of common programmed timings.



Dynamic Load

The 63200E series offers high speed, 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. When the load current changes continuously, the internal monitoring mechanism and line circuit can minimize the current waveform distortion. The dynamic change is up to 20kHz for model 150V.



Master/Slave Parallel Control

When the need is for increased power, 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.



GPIB



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% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.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% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.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		

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	0.0025 Ω~25 Ω (16V/10kW) 0.01 Ω~100 Ω (80V/10kW) 0.25 Ω~500 Ω (150V/10kW)			0.0025 Ω~25 Ω (16V/12kW) 0.01 Ω~100 Ω (80V/12kW) 0.25 Ω~500 Ω (150V/12kW)			0.0017 Ω~16.6667 Ω (16V/15kW) 0.0067 Ω~66.6667 Ω (80V/15kW) 0.167 Ω~333.334 Ω (150V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.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	0.0017 Ω-16.6667 Ω (16V/18kW) 0.0067 Ω-66.6667 Ω (80V/18kW) 0.167 Ω-333.334 Ω (150V/18kW)			0.0013 Ω-12.5 Ω (16V/20kW) 0.005 Ω-50 Ω (80V/20kW) 0.125 Ω-250 Ω (150V/20kW)			0.0013 Ω-12.5 Ω (16V/24kW) 0.005 Ω-50 Ω (80V/24kW) 0.125 Ω-250 Ω (150V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.S.			Vin/Rset*(0.2%)+0.2% I.F.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		

SPECIFICATIONS-5 (600V)									
600V Models	63202E-600-140			63203E-600-210			63204E-600-280		
Voltage*2	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								
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.								
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% I.F.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.								
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.								
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								
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								
Current	0~35A	0~175A	0~350A	0~42A	0~210A	0~420A	0~56A	0~280A	0~560A
Power*3	0~5,000W								
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.								
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% I.F.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.								
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.								
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								
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		

Video & Color
Flat Panel Display
LED/Lighting
Optical Devices
Photovoltaic Test & Automation
Automated Optical Inspection
Battery Test & Automation
Passive Component
Electrical Safety
Semiconductor/IC
PXI Test & Measurement
General Purpose
Intelligent Manufacturing System
Turnkey Test & Automation

SPECIFICATIONS-7 (600V)									
600V Models	63210E-600-700			63212E-600-840			63215E-600-1050		
Voltage*2	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								
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.								
Constant Resistance Mode									
Range	0.025 Ω~250 Ω (80V/10kW) 0.1 Ω~1,000 Ω (150V/10kW) 1 Ω~2,000 Ω (600V/10kW)			0.025 Ω~250 Ω (80V/12kW) 0.1 Ω~1,000 Ω (150V/12kW) 1 Ω~2,000 Ω (600V/12kW)			0.017 Ω~166.667 Ω (80V/15kW) 0.067 Ω~666.667 Ω (150V/15kW) 0.67 Ω~1,333.34 Ω (600V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.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.								
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.								
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								
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								
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								
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.								
Constant Resistance Mode									
Range	0.017 Ω-166.667 Ω (80V/18kW) 0.067 Ω-666.667 Ω (150V/18kW) 0.67 Ω-1,333.34 Ω (600V/18kW)			0.013 Ω-125 Ω (80V/20kW) 0.05 Ω-500 Ω (150V/20kW) 0.5 Ω-1,000 Ω (600V/20kW)			0.013 Ω-125 Ω (80V/24kW) 0.05 Ω-500 Ω (150V/24kW) 0.5 Ω-1,000 Ω (600V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.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.								
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.								
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								
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		

SPECIFICATIONS-9 (1,200V)									
1,200V Models	63202E-1200-80			63203E-1200-120			63204E-1200-160		
Voltage*2	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								
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.								
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% I.F.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.								
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.								
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								
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								
Current	0~20A	0~100A	0~200A	0~24A	0~120A	0~240A	0~32A	0~160A	0~320A
Power*3	0~5,000W								
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.								
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% I.F.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.								
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.								
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								
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		

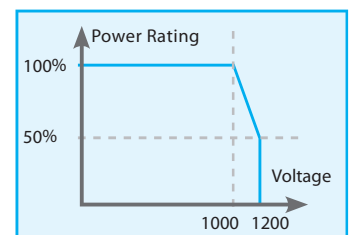
Video & Color
Flat Panel Display
LED/Lighting
Optical Devices
Photovoltaic Test & Automation
Automated Optical Inspection
Battery Test & Automation
Passive Component
Electrical Safety
Semiconductor/IC
PXI Test & Measurement
General Purpose
Intelligent Manufacturing System
Turnkey Test & Automation

SPECIFICATIONS-11 (1,200V)									
1,200V Models	63210E-1200-400			63212E-1200-480			63215E-1200-600		
Voltage*2	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								
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.								
Constant Resistance Mode									
Range	0.05 Ω~0.5k Ω (150V/10kW) 0.2 Ω~2k Ω (600V/10kW) 5 Ω~10k Ω (1,200V/10kW)			0.05 Ω~0.5k Ω (150V/12kW) 0.2 Ω~2k Ω (600V/12kW) 5 Ω~10k Ω (1,200V/12kW)			0.034 Ω~0.333334k Ω (150V/15kW) 0.14 Ω~1.33334k Ω (600V/15kW) 3.34 Ω~6.66667k Ω (1,200V/15kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.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.								
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.								
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								
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								
Current	0~72A	0~360A	0~720A	0~80A	0~400A	0~800A	0~96A	0~480A	0~960A
Power*3	0~18,000W								
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.								
Constant Resistance Mode									
Range	0.034 Ω~0.333334k Ω (150V/18kW) 0.14 Ω~1.33334k Ω (600V/18kW) 3.34 Ω~6.66667k Ω (1,200V/18kW)			0.025 Ω~0.25k Ω (150V/20kW) 0.1 Ω~1k Ω (600V/20kW) 2.5 Ω~5k Ω (1,200V/20kW)			0.025 Ω~0.25k Ω (150V/24kW) 0.1 Ω~1k Ω (600V/24kW) 2.5 Ω~5k Ω (1,200V/24kW)		
Accuracy	Vin/Rset*(0.2%)+0.2% I.F.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.								
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.								
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								
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		

GENERAL SPECIFICATIONS			
Voltage	150V	600V	1200V
Static mode			
CZ			
Range		CL : 30 μ F~50,000 μ F RL : as CR Ls : 0.1 μ H~16 μ H Rs : 30m Ω ~20 Ω	
Resolution		CL : 1 μ F Ls : 0.1 μ H Rs : 1m Ω RL : as CR	
Dynamic mode			
T1 & T2		0.020~99.999ms/100ms~99,999ms	
Resolution		1 μ s/1ms	
Accuracy		1 μ s+100ppm	
Min. rise time *7	100 μ s (Typical)	100 μ s (Typical)	100 μ s (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		10k Ω	
Resolution		4mV	
Current Monitor			
Bandwidth		20kHz	
Range		0 ~ rated current	
Output		0~10V	
Accuracy		0.5%F.S.	
Output impedance		10k Ω	
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)	800k Ω (Typical)	1M Ω (Typical)	2M Ω (Typical)
Operating Temp		0~40 $^{\circ}$ C	
Storage Temp		-20~80 $^{\circ}$ C	
Line Voltage		100~240 VAC / 47~63Hz	

1. The specifications are guaranteed to meet specified performance at temperature range of $25 \pm 5^{\circ}$ 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 Irange 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.



ORDERING INFORMATION

63200E High Power 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		
63205E-150-500		500A	5kW	4U	
63206E-150-600		600A	6kW		
63208E-150-800		800A	8kW		
63210E-150-1000*		1000A	10kW	7U	
63212E-150-1200		1200A	12kW		
63215E-150-1500		1500A	15kW	10U	
63218E-150-1800		1800A	18kW		
63220E-150-2000*		2000A	20kW		
63224E-150-2000		2000A	24kW	13U	
63202E-600-140*		600V	140A	2kW	3U
63203E-600-210			210A	3kW	
63204E-600-280	280A		4kW		
63205E-600-350	350A		5kW	4U	
63206E-600-420	420A		6kW		
63208E-600-560	560A		8kW		
63210E-600-700*	700A		10kW	7U	
63212E-600-840	840A		12kW		
63215E-600-1050	1050A		15kW	10U	
63218E-600-1260	1260A		18kW		
63220E-600-1400*	1400A		20kW		
63224E-600-1680	1680A		24kW	13U	
63202E-1200-80*	1200V		80A	2kW	3U
63203E-1200-120			120A	3kW	
63204E-1200-160		160A	4kW		
63205E-1200-200		200A	5kW	4U	
63206E-1200-240		240A	6kW		
63208E-1200-320		320A	8kW		
63210E-1200-400*		400A	10kW	7U	
63212E-1200-480		480A	12kW		
63215E-1200-600		600A	15kW	10U	
63218E-1200-720		720A	18kW		
63220E-1200-800*		800A	20kW		
63224E-1200-960		960A	24kW	13U	

* 2kW, 8kW, 10kW, 15kW, 20kW models will be available in April, 2017.

Options	
A600009	GPIB cable (200cm)
A600010	GPIB cable (60cm)
A632000	Softpanel for 63200E Series
A632006	NI USB-6211 Bus-Powered Multifunction DAQ
A636000	GPIB interface
A636010	Ethernet interface
B632000	Handle for 3U models (2kW/3kW)
B632001	Handle for 4U models (4kW/5kW/6kW)
B632002	Rack mounting kit for 7U models (8kW/10kW/12kW)
B632003	Rack mounting kit for 10U models (15kW/18kW)
B632004	Rack mounting kit for 13U models (20kW/24kW)