

# High Speed DC Electronic Load 6330 Series

## SPECIFICATIONS

Model	63301		63302(100Wx2)		63303		63305							
Power	20W	200W	20W	100W	30W	300W	30W	300W						
Current	0~4A	0~40A	0~2A	0~20A	0~6A	0~60A	0~1A	0~10A						
Voltage	1~80V		1~80V		1~80V		2.5~500V							
Min. Operation Voltage (DC)	1.0V at 4A	1.0V at 40A	1.0V at 2A	1.0V at 20A	1.0V at 6A	1.0V at 60A	2V at 1A	2V at 10A						
<b>Constant Current Mode</b>														
Range	0~4A	0~40A	0~2A	0~20A	0~6A	0~60A	0~1A	0~10A						
Resolution	1mA	10mA	0.5mA	5mA	1.5mA	15mA	0.25mA	2.5mA						
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.	0.1%+0.1%F.S.	0.1%+0.2%F.S.						
<b>Constant Resistance Mode</b>														
Range	0.0375Ω~150Ω (200W/16V) 1.875Ω~7.5kΩ (200W/80V)		0.075Ω~300Ω (100W/16V) 3.75Ω~15kΩ (100W/80V)		0.025Ω~100Ω (300W/16V) 1.25Ω~5kΩ (300W/80V)		1.25Ω~5Ω (300W/125V) 50Ω~200kΩ (300W/500V)							
Resolution	12 bits		12 bits		12 bits		12 bits							
Accuracy	150Ω: 0.1%+ 0.2% 7.5kΩ: 0.01%+ 0.1%		300Ω: 0.1%+ 0.2% (0.075~30Ω) 15kΩ: 0.01%+ 0.1% (30~750Ω)		100Ω: 0.1%+ 0.2% (0.025~100Ω) 5kΩ: 0.01%+ 0.1% (10~5k)		5kΩ: 20mΩ + 0.2% 200kΩ: 5mΩ + 0.1%							
<b>Constant Voltage Mode</b>														
Range	1~80V		1~80V		2.5~500V		2.5~500V							
Resolution	20mV		20mV		20mV		125mV							
Accuracy	0.05% ± 0.1%F.S.		0.05% ± 0.1%F.S.		0.05% ± 0.1%F.S.		0.05% ± 0.1%F.S.							
<b>DYNAMIC MODE</b>														
<b>Dynamic Mode</b>		C.C. Mode		C.C. Mode		C.C. Mode		C.C. Mode						
T1 & T2	0.025mS~10mS/Res:1uS 1mS~30S/Res:1mS		0.025mS~10mS/Res:1uS 1mS~30S/Res:1mS		0.025mS~10mS/Res:1uS 1mS~30S/Res:1mS		0.025mS~10mS/Res:1uS 1mS~30S/Res:1mS							
Accuracy	1uS/1mS+100ppm		1uS/1mS+100ppm		1uS/1mS+100ppm		1uS/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	0.16~40mA/μS	1.6~400mA/μS						
Resolution	0.64mA/μS	6.4mA/μS	0.32mA/μS	3.2mA/μS	0.001A/μS	0.01A/μS	0.16mA/μS	1.6mA/μS						
Current	0~4A	0~40A	0~2A	0~20A	0~6A	0~60A	0~1A	0~10A						
Resolution	1mA	10mA	0.5mA	5mA	1.5mA	15mA	0.25mA	2.5mA						
Current Accuracy	0.4%F.S.		0.4%F.S.		0.4%F.S.		0.4%F.S.							
<b>MEASUREMENT SECTION</b>														
<b>Voltage Read Back</b>														
Range	0~16V	0~80V	0~16V	0~80V	0~16V	0~80V	0~125V	0~500V						
Resolution	0.5mV	2.5mV	0.5mV	2.5mV	0.5mV	2.5mV	4mV	16mV						
Accuracy	0.05% + 0.05%F.S.		0.05% + 0.05%F.S.		0.05% + 0.05%F.S.		0.05% + 0.05%F.S.							
<b>Current Read Back</b>														
Range	0~4A	0~40A	0~2A	0~20A	0~6A	0~60A	0~1A	0~10A						
Resolution	0.125mA	1.25mA	0.0625mA	0.625mA	0.1875mA	1.875mA	0.032mA	0.320mA						
Accuracy	0.1% + 0.1%F.S.		0.1% + 0.1%F.S.		0.1% + 0.1%F.S.		0.1% + 0.1%F.S.							
<b>PROTECTIVE SECTION</b>														
Over Power Protection	≈20.8W	≈208W	≈20.8W	≈104W	≈31.2W	≈312W	≈31.2W	≈312W						
Over Current Protection	≈4.08A	≈40.8A	≈2.04A	≈20.4A	≈6.12A	≈61.2A	≈1.02A	≈10.2A						
Over Temperature Protection	≈85°C		≈85°C		≈85°C		≈85°C							
Over Voltage Protection	≈81.6V		≈81.6V		≈81.6V		≈510V							
<b>GENERAL</b>														
<b>Short Circuit</b>														
Current	-	≈40A	-	≈20A	-	≈60A	-	≈10A						
Resistance (CC,CV)	-	0V	-	0V	-	0V	-	0V						
Resistance (CR)	-	≈0.0375Ω	-	≈0.075Ω	-	≈0.025Ω	-	≈1.25Ω						
Input Resistance (Load Off)	100kΩ (Typical)		100kΩ (Typical)		100kΩ (Typical)		100kΩ (Typical)							
Temperature Coefficient	100PPM/°C (Typical)		100PPM/°C (Typical)		100PPM/°C (Typical)		100PPM/°C (Typical)							
Power	Supply from 6314 Mainframe		Supply from 6314 Mainframe		Supply from 6314 Mainframe		Supply from 6314 Mainframe							
Dimensions (WxHxD)	81 x 172 x 495 mm		81 x 172 x 495 mm		81 x 172 x 495 mm		81 x 172 x 495 mm							
Weight	4.2 Kg		4.2 Kg		4.2 Kg		4.2 Kg							
Operating Range	0~40°C		0~40°C		0~40°C		0~40°C							
EMC & Safety	CE		CE		CE		CE							

## SPECIFICATIONS

Model	63306		63307(30W & 250W)			63308		63312								
Power	60W	600W	30W	30W	250W	60W	600W	120W	1200W							
Current	0-12A	0-120A	0-5A	0-4A	0-40A	0-2A	0-20A	0-24A	0-240A							
Voltage	1-80V		1-80V			2.5-500V		1-80V								
Min. Operating Voltage (DC)	1.0V at 12A	1.0V at 120A	1.0V at 5A	1.0V at 4A	1.0V at 40A	2V at 2A	2V at 20A	1.0V at 24A	1.0V at 240A							
<b>Constant Current Mode</b>																
Range	0-12A	0-120A	0-5A	0-4A	0-40A	0-2A	0-20A	0-24A	0-240A							
Resolution	3mA	30mA	1.25mA	1mA	10mA	0.5mA	5mA	6mA	60mA							
Accuracy	0.1%+0.1%F.S.	0.1%+0.2%F.S.	0.1%+0.1%F.S.	0.1%+0.1%F.S.	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.							
<b>Constant Resistance Mode</b>																
Range	12.5mΩ-50mΩ(600W/16V) 0.625Ω-2.5kΩ(600W/80V)		0.3Ω-1.2kΩ(30W/16V) 15Ω-60kΩ(30W/80W)		0.0375Ω-150Ω(250W/16V) 1.875Ω-7.5kΩ(250W/80V)	0.0625Ω-2.5kΩ(600W/125V) 25Ω-100kΩ(600W/500V)		6.25mΩ-25mΩ(1200W) 0.3125Ω-1.25kΩ(1200W)								
Resolution	12 bits		12 bits		12 bits	12 bits		12 bits								
Accuracy	50Ω: 0.1%+ 0.1%(0.0125-5Ω) 25kΩ: 0.01%+ 0.1%(5-125Ω)		1.2kΩ: 0.1%+ 0.2% 60kΩ: 0.01%+ 0.1%		150Ω: 0.1%+ 0.2% 7.5kΩ: 0.01%+ 0.1%	25kΩ: 50mΩ+ 0.2% 100kΩ: 5mΩ+ 0.1%		25Ω: 0.1%+ 0.2% 1.25kΩ: 0.01%+ 0.1%								
<b>Constant Voltage Mode</b>																
Range	1-80V		1-80V			2-500V		1-80V								
Resolution	20mV		20mV			125mV		20mV								
Accuracy	0.05% ± 0.1%F.S.		0.05% ± 0.1%F.S.			0.05% ± 0.1%F.S.		0.05% ± 0.1%F.S.								
<b>DYNAMIC MODE</b>																
<b>Dynamic Mode</b>		C.C. Mode		C.C. Mode		C.C. Mode		C.C. Mode								
T1 & T2	0.025mS-10mS/Res:1μS 1mS-30S/Res:1mS		0.025mS-10mS/Res:1μS 1mS-30S/Res:1mS		0.025mS-10mS/Res:1μS 1mS-30S/Res:1mS		0.025mS-10mS/Res:1μS 1mS-30S/Res:1mS		0.025mS-10mS/Res:1μS 1mS-30S/Res:1mS							
Accuracy	1μS/1mS+100ppm		1μS/1mS+100ppm		1μS/1mS+100ppm		1μS/1mS+100ppm		1μS/1mS+100ppm							
Slew Rate	0.002-0.5A/μS	0.02-5A/μS	0.8-200mA/μS	0.64-160mA/μS	64-1600mA/μS	0.32-80mA/μS	3.2-800mA/μS	0.004-1A/μS	0.04-10A/μS							
Resolution	0.002A/μS	0.02A/μS	0.8mA/μS	0.64mA/μS	6.4mA/μS	0.32mA/μS	3.2mA/μS	0.004A/μS	0.04A/μS							
Current	0-12A	0-120A	0-5A	0-4A	0-40A	0-2A	0-20A	0-24A	0-240A							
Resolution	3mA	30mA	1.25mA	1mA	10mA	0.5mA	5mA	6mA	60mA							
Current Accuracy	0.4%F.S.		0.4%F.S.			0.4%F.S.		0.4%F.S.								
<b>MEASUREMENT SECTION</b>																
<b>Voltage Read Back</b>																
Range	0-16V	0-80V	0-16V	0-80V	0-16V	0-16V	0-125V	0-500V	0-16V	0-80V						
Resolution	0.5mV	2.5mV	0.5mV	2.5mV	0.5mV	2.5mV	4mV	16mV	0.5mV	2.5mV						
Accuracy	0.05% + 0.05%F.S.		0.05% + 0.05%F.S.			0.05% + 0.05%F.S.		0.05% + 0.05%F.S.		0.05% + 0.05%F.S.						
<b>Current Read Back</b>																
Range	0-12A	0-120A	0-5A	0-4A	0-40A	0-12A	0-20A	0-24A	0-240A							
Resolution	0.375mA	3.75mA	0.15625mA	0.125mA	1.25mA	0.375mA	0.625mA	0.75mA	7.5mA							
Accuracy	0.1% + 0.1%F.S.		0.1% + 0.1%F.S.			0.1% + 0.1%F.S.		0.15% + 0.15%F.S.								
<b>PROTECTIVE SECTION</b>																
Over Power Protection	≈62.4W	≈624W	≈31.2W	≈31.2W	≈260W	≈62.4W	≈624W	≈124.8W	≈1248W							
Over Current Protection	≈12.24A	≈122.4W	≈5.1A	≈4.08A	≈40.8A	≈2.04A	≈20.4A	≈24.48A	≈244.8A							
Over Temperature Protection	≈85°C				≈85°C		≈85°C		≈85°C							
Over Voltage Protection	≈81.6V				≈81.6V		≈510V		≈81.6V							
<b>GENERAL</b>																
<b>Short Circuit</b>																
Current	-	≈120A	-	-	≈40A	-	≈20A	-	≈240A							
Resistance (CC,CV)	-	0V	-	-	0V	-	0V	-	0V							
Resistance (CR)	-	≈0.0125Ω	-	-	≈0.0375Ω	-	≈0.625Ω	-	≈0.00625Ω							
Input Resistance (Load Off)	100kΩ (Typical)	100kΩ (Typical)			100kΩ (Typical)		100kΩ (Typical)									
Temperature Coefficient	100PPM/°C (Typical)	100PPM/°C (Typical)			100PPM/°C (Typical)		100PPM/°C (Typical)									
Power	Supply from 6314 Mainframe				Supply from 6314 Mainframe		Supply from 6314 Mainframe		Supply from 6314 Mainframe							
Dimensions (WxHxD)	162x172x495 mm				81 x 172 x 495 mm		162 x 172 x 495 mm		324 x 172 x 495 mm							
Weight	8.4 Kg				4.2 Kg		8.4 Kg		16.8 Kg							
Operating Range	0-40°C				0-40°C		0-40°C		0-40°C							
EMC & Safety	CE				CE		CE		CE							

\* Under Development