

7100 Series Battery Cell Testing



7100 Series Battery System Specification



Static Performance		20mA	10A	150A	300A
AC Grid Voltage in V		3 phase - 400 - 480Vrms - 50/60Hz			
Number of channels per cabinet	Large Cabinet	1024	512	64	64
	Small Cabinet	512	256	32	32
Parallel mode per number of channels		128	64	8	8
Serial mode		Up to 600V		Up to 80V	
Operation modes		CC, CV, CP, CR			
Max. power		200 mA	125W	1500W	2000W
Current	Range	20 mA	10A	150A	300A
Voltage	Range	10 V	10V	10V	10V
Efficiency		95%			
Measurement		Basic	Standard	Premium	
Current	Resolution	0.00038% range			
	Accuracy	0.05% range	0.03% of range	0.01% of range	
Voltage	Resolution	0.00038% range			
	Accuracy	0.05% range	0.03% of range	0.01% of range	
Waveform Measurement ¹					
Waveform Bandwidth		1 MHz			
Measurement		Voltage & Current			
Digitizing Rate Range		10K - 1 MSample/Sec			
Default Digitizing Rate		100 K/Sample/Sec			
Memory		64 K Sample			
Dynamic Performance					
Current rise/fall Time		< 0.8 ms (10 - 90% step)			
Time from minus to maximum current		< 1 ms			
Ripple		≤ 25 mV			
Built-in Interfaces Specifications					
Network		EtherCAT		Ethernet	
Sampling Rate		1kHz		Up to 100kHz	
Built-in IO per Channel		Basic	Standard	Premium	
Voltage sense		Yes	Yes	Yes	
Analog IN		Yes	Yes	Yes	
Analog OUT		Yes	Yes	Yes	
Thermocouple		1 ch	1 ch	1ch	
Thermistors		-	2ch	4ch	
RS485 (Full Duplex)		-	Yes	Yes	
Relay Driver (30 Vdc/2A)		-	-	2ch	
Safety					
Isolation AC Input		3.8 kV AC Input to chassis / 3.8 kV AC to DC Output			
Isolation UUT Input		600 V UUT to chassis 3.8 kV UUT to chassis 3.8 kV UUT to chassis			
Safety Interlocks		Emergency stop, external user input			
Internal Protection		Over- Current (OC) Under-Voltage (UV) Over-Voltage (OV) Over-Power (OP) Over-temperature			
Programmable Safety Limits		Over- Current (OC) Under-Voltage (UV) Over-Voltage (OV) Over-Power (OP)			
Internal Watchdog Timer		Continuously control and monitoring			
Mechanical Specifications					
Cabinet Size (WxDxH)	Large Cabinet	32 x 48 x 87" / 2200 x 800 x 1200 mm			
	Small Cabinet	32 x 48 x 55" 1400 x 800 x 1200 mm			
Cabinet Weight		3086lbs/1400kg per full cabinet 1763lbs/800 kg per full cabinet			
Cooling method		Forced Airflow			
Operating noise		< 60dB			
Color		Light Grey (RAL7035)			

¹ Waveform Measurement is only included in the Premium Version.

