

LXinstruments GmbH  
Rudolf-Diesel-Str. 36  
71154 Nufringen  
Germany



## TECHNICAL PRODUCT INFORMATION

### Test & measurement instruments

- ▶ high - quality
- ▶ moderate prices
- ▶ excellent precision

#### **Your contact:**

Technical support, services, demo & rental equipment, price information  
& quotes, consulting:

Tel.: +49(0)7032 / 895 93-3

Mail: [sales@lxinstruments.com](mailto:sales@lxinstruments.com)

Web: [www.lxinstruments.com](http://www.lxinstruments.com)

Shop: [www.lxinstruments.com/shop](http://www.lxinstruments.com/shop)

## PEL-500 Specifications

The specifications apply when the PEL-500 is powered on for at least 30 minutes under +20°C~+30°C.

FRONT					
REAR					
POWER	<b>250W/350W</b>			<b>700W</b>	

Model	PEL-503-80-50	PEL-504-80-70	PEL-504-500-15	PEL-507-80-140	PEL-507-500-30
<b>INPUT RATINGS</b>					
Power(Watt)	250 W	350 W	350 W	700 W	700 W
Current(Ampere)	50 A	70 A	15 A	140 A	30 A
Voltage(Volt)	80 V	80 V	500 V	80 V	500 V
Min. Operating Voltage	1.0V @ 50A	1.2V @ 70A	6V @ 15A	0.9V @ 140A	3V @ 30A
<b>PROTECTIONS</b>					
Over Power Protection(OPP)	≈262.5W	≈367.5W	≈367.5W	≈735W	≈735W
Over Current Protection(OCP)	≈52.5A	≈73.5A	≈15.75A	≈147A	≈31.5A
Over Voltage Protection(OVP)	≈84V	≈84V	≈525V	≈84V	≈525V
Over Temp. Protection(OTP)	YES	YES	YES	YES	YES
<b>CC Mode</b>					
Range	0~5.04~50.4A	0~7.02~70.2A	0~1.5~15A	0~14.04~140.4A	0~3~30A
Resolution	0.084mA/0.84mA	0.117mA/1.17mA	0.025mA/0.25mA	0.234mA/2.34mA	0.05mA/ 0.5mA
Accuracy	±0.1% of (SETTING + RANGE)				
<b>CR Mode</b>					
Range	0.016~1.6~96000Ω	0.0114~1.14~68400Ω	0.4~40~2400000Ω	0.0057~0.57~34200Ω	0.2~20~1200000Ω
Resolution	26.666μΩ /0.010416mSiemens	19μΩ /0.014619mSiemens	666.667μΩ /0.416μSiemens	9.5μΩ /29.239μSiemens	333.334μΩ /0.833μSiemens
Accuracy	±0.2% of (SETTING + RANGE)				
<b>CV Mode</b>					
Range	0~8.1~81V	0~8.1~81V	0~60~500V	0~8.1~81V	0~60~500V
Resolution	0.135mV/1.35mV	0.135mV/1.35mV	1mV/10mV	0.135mV/1.35mV	1mV/10mV
Accuracy	±0.05% of (SETTING + RANGE)				
<b>CP Mode</b>					

Range	0~25.02~250.2W (Imax=r1:5A, r2:50A)		0~35.04~350.4W (Imax=r1:7A, r2:70A)		0~35.04~350.4W (Imax=r1:1.5A, r2:15A)		0~70.02~700.2W (Imax=r1:14A, r2:140A)		0~70.02~700.2W (Imax=r1:3A, r2:30A)		
Resolution	0.417mW/4.17mW		0.584mW/5.84mW		0.584mW/5.84mW		1.167mW/11.67mW		1.17mW/117mW		
Accuracy	±0.5% of (SETTING + RANGE)										
<b>Dynamic Mode</b>											
THIGH/TLOW	10µS to 9.999 Sec										
Resolution	0.001/0.01/0.1/1mS										
Slew rate	L	0.032~2A/µs		0.0464~2.90A/µs		1~62.5mA/µs		0.0096~0.6A/µs		2~125mA/µs	
	H	3.2~200mA/µs		4.64~290mA/µs		10~625mA/µs		0.096~6A/µs		20~1250mA/µs	
Accuracy	±5%±10µs										
<b>Measurement</b>											
Voltage Read Back	Range (5 Digital)	0~8.1~81V		0~8.1~81V		0~60~500V		0~8.1~81V		0~60~500V	
	Resolution	0.135mV/1.35mV		0.135mV/1.35mV		1mV/10mV		0.135mV/1.35mV		1mV/10mV	
	Accuracy	±0.025% of (READING + RANGE)									
Current Read Back	Range (5 Digital)	0~5.04~50.4A		0~7.02~70.2A		0~1.5~15A		0~14.04~140.4A		0~3~30A	
	Resolution	0.084mA/0.84mA		0.117mA/1.17mA		0.025mA/0.25mA		0.234mA/2.34mA		0.05mA/ 0.5mA	
	Accuracy	±0.1% of (READING + RANGE)									
Power Read Back	Range (5 Digital)	25W	250W	35W	350W	35W	350W	70W	700W	70W	700W
	Resolution	0.001W	0.01W	0.001W	0.01W	0.001W	0.01W	0.001W	0.01W	0.001W	0.01W
	Accuracy	±0.1% of (READING + RANGE)									
<b>Surge Test</b>											
Surge & Normal current	0~50A		0~70A		0~15A		0~140A		0~30A		
Surge time	10~1000ms		10~1000ms		10~1000ms		10~1000ms		10~1000ms		
Surge step	1~5		1~5		1~5		1~5		1~5		
<b>Battery Discharge Test</b>											
UVP	0~81V		0~81V		0~500V		0~81V		0~500V		
Time	1~99999 Sec		1~99999 Sec		1~99999 Sec		1~99999 Sec		1~99999 Sec		
Capacity	0.1~19999.9AH/0.1~19999.9WH										
<b>Others</b>											
Load ON Voltage	0.1~25V				0.4~100V		0.1~25V		0.4~100V		
Accuracy	1% of (SETTING + RANGE)										
Load OFF Voltage	0~25V				0~100V		0~25V		0~100V		
Accuracy	0.05% of (SETTING + RANGE)										
Imonitor (Non-isolated)	5.04 A/V		7.02 A/V		1.5 A/V		14.04 A/V		3 A/V		

Current Monitor	Full scale: 10V				
Accuracy	0.5% of (SETTING+ RANGE)				
Typical Short Resistance	0.018Ω	0.0169Ω	0.367Ω	0.0053Ω	0.087Ω
Max. short Current	50A	70A	15A	140A	30A
Power input	115/230 Vac±10%, 50/60Hz				
Interface (Standard)	USB/RS232				
Power Consumption	40 VA			60 VA	
Dimension (HxWxD)	205 x 123 x 477mm	205 x 123 x 477mm	205 x 123 x 477mm	205 x 231 x 480mm	205 x 231 x 480mm
Weight	5.3kg	5.3kg	5.3kg	10.3kg	10.3kg