

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-3000H Specifications

The specifications apply when the PEL-3000H is powered on for at least 30 minutes under +20°C~+30°C.

### PEL-3021H / PEL-3041H / PEL-3111H / PEL-3211H



Model		PEL-3021H	PEL-3041H	PEL-3111H	PEL-3211H
Voltage		0V ~ 800V	0V ~ 800V	0V ~ 800V	0V ~ 800V
Current		8.75A	17.5A	52.5A	105A
Power		175W	350W	1050W	2100W
Input Resistance		3.24MΩ	3.24MΩ	3.24MΩ	NA
Min.Operating Voltage		5V at 8.75A	5V at 17.5A	5V at 52.5A	5V at 105A
		2.5V at 4.375A	2.5V at 8.75A	2.5V at 26.25A	2.5V at 52.5A
<b>CC mode</b>					
Operating Range	H	0A ~ 8.75A	0A ~ 17.5A	0A ~ 52.5A	0A ~ 105A
	M	0A ~ 875mA	0A ~ 1.75A	0A ~ 5.25A	0A ~ 10.5A
	L	0A ~ 87.5mA	0A ~ 175mA	0A ~ 525mA	0A ~ 1.05A
Accuracy of Setting	H、M	± ( 0.2%set+0.1%fs <sup>*1</sup> ) +Vin <sup>*2</sup> /3.24MΩ			± ( 1.2%set+1.1%fs )
	L	± ( 0.2%set+0.1%fs ) +Vin <sup>*2</sup> /3.24MΩ			± ( 1.2%set+1.1%fs )
Accuracy of Setting(Parallel)	H、M、L	± ( 1.2%set+1.1%fs <sup>*3</sup> )			± ( 1.2%set+1.1%fs )
Resolution	H	300μA	0.6mA	2mA	NA

	M	30μA	60μA	200μA	NA
	L	3μA	6μA	20μA	NA
<b>CR mode</b>					
Operating Range	H	1.75S ~ 30μS ( 571mΩ ~ 33.3kΩ )	3.5S ~ 60μS ( 285mΩ ~ 16.6kΩ )	10.5S ~ 180μS ( 95.2mΩ ~ 5.55kΩ )	21S ~ 360μS(95.2mΩ ~ 2.777kΩ)
	M	175mS ~ 3μS ( 5.71Ω ~ 333MΩ )	350mS ~ 6μS ( 2.85mΩ ~ 166kΩ )	1.05S ~ 18μS ( 952mΩ ~ 55.5kΩ )	2.1S ~ 36μS(476mΩ ~ 27.77kΩ)
	L	17.5mS ~ 0.3μS ( 57.1Ω ~ 3.33MΩ )	35mS ~ 0.6μS ( 28.5mΩ ~ 1.66MΩ )	105mS ~ 1.8μS ( 9.52Ω ~ 555kΩ )	210mS ~ 3.6μS(4.762Ω ~ 277.7kΩ)
Accuracy of Setting	H、M	$\pm ( 0.5\%set+0.5\%fs^{*1} ) +Vin^{*2}/3.24M\Omega$			$\pm ( 1.2\%set+1.1\%fs )$
	L	$\pm ( 0.5\%set+0.5\%fs ) +Vin^{*2}/3.24M\Omega$			NA
	Parallel ( TYP )	$\pm ( 1.2\%set+1.1\%fs^{*3} )$			NA
Resolution	H	30μS	60μS	180 μS	NA
	M	3μS	6μS	18 μS	NA
	L	0.3μS	0.6μS	1.8 μS	NA
<b>CV mode</b>					
Operating Range	H	5V ~ 800V	5V ~ 800V	5V ~ 800V	5V ~ 800V
	L	5V ~ 80V	5V ~ 80V	5V ~ 80V	5V ~ 80V
Accuracy of Setting	H, L Range	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$
	Parallel ( TYP )	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$	$\pm ( 0.2\%set+0.2\%fs )$
Resolution	H	20mV	20mV	20mV	NA
	L	2mV	2mV	2mV	NA
<b>CP mode</b>					
Operating Range	H	17.5W ~ 175W	35W ~ 350W	105W ~ 1050W	210W ~ 2100W
	M	1.75W ~ 17.5W	3.5W ~ 350W	10.5W ~ 105W	21W ~ 210W
	L	0.175W ~ 1.75W	0.35W ~ 10.5W	1.05W ~ 10.5W	2.1W ~ 21W
Setting Range	H	0W ~ 175W	0W ~ 350W	0W ~ 1050W	0W ~ 2100W
	M	0W ~ 17.5W	0W ~ 350W	0W ~ 105W	0W ~ 210W
	L	0W ~ 1.75W	0W ~ 10.5W	0W ~ 10.5W	0W ~ 21W

Accuracy of Setting	H、M	$\pm (0.6\%set+1.4\%fs) + Vin/3.24M\Omega$			$\pm (5\%fs)TYP$
Resolution	H	10mW	10mW	100mW	NA
	M	1mW	1mW	10mW	NA
	L	0.1mW	0.1mW	1mW	NA
<b>Parallel mode</b>					
Capacity		875W	1750W	5250W	PEL-3111H with 4 booster units: Max 9,45kW
<b>Slew Rate</b>					
Operation Mode		CC、CR	CC、CR	CC、CR	NA
Setting Range	CC H	0.14mA/ $\mu$ s ~ 140mA/ $\mu$ s	0.280mA/ $\mu$ s ~ 280.0mA/ $\mu$ s	0.840mA/ $\mu$ s ~ 840mA/ $\mu$ s	NA
	CC M	0.014 $\mu$ A/ $\mu$ s ~ 14mA/ $\mu$ s	0.0280mA/ $\mu$ s ~ 28.00mA/ $\mu$ s	0.0840mA/ $\mu$ s ~ 84.00mA/ $\mu$ s	NA
	CC L	1.4 $\mu$ A/ $\mu$ s ~ 1400 $\mu$ A/ $\mu$ s	2.80 $\mu$ A/ $\mu$ s ~ 2800 $\mu$ A/ $\mu$ s	0.00840mA/ $\mu$ s ~ 8.400mA/ $\mu$ s	NA
	CR H	0.014mA/ $\mu$ s ~ 14mA/ $\mu$ s	0.0280mA/ $\mu$ s ~ 28.00mA/ $\mu$ s	0.0840mA/ $\mu$ s ~ 84.00mA/ $\mu$ s	NA
	CR M	0.0014mA/ $\mu$ s ~ 1.4mA/ $\mu$ s	0.00280mA/ $\mu$ s ~ 2.800mA/ $\mu$ s	0.00840mA/ $\mu$ s ~ 8.400mA/ $\mu$ s	NA
	CR L	0.14 $\mu$ A/ $\mu$ s ~ 140 $\mu$ A/ $\mu$ s	0.280 $\mu$ A/ $\mu$ s ~ 280.0 $\mu$ A/ $\mu$ s	0.000840mA/ $\mu$ s ~ 0.8400mA/ $\mu$ s	NA
Accuracy of Setting		$\pm (10\%set+25\mu s)$	$\pm (10\%set+25\mu s)$	$\pm (10\%set+25\mu s)$	NA
Resolution		50 $\mu$ A/ $\mu$ s (14mA ~ 140mA/ $\mu$ s)	100 $\mu$ A/ $\mu$ s (28mA ~ 280mA/ $\mu$ s)	300 $\mu$ A/ $\mu$ s (84mA ~ 0.84A/ $\mu$ s)	NA
		5 $\mu$ A/ $\mu$ s (1.4mA ~ 14mA/ $\mu$ s)	10 $\mu$ A/ $\mu$ s (2.8mA ~ 28mA/ $\mu$ s)	30 $\mu$ A/ $\mu$ s (8.4mA ~ 84mA/ $\mu$ s)	NA
		0.5 $\mu$ A/ $\mu$ s (140 $\mu$ A ~ 1.4mA/ $\mu$ s)	1 $\mu$ A/ $\mu$ s (280 $\mu$ A ~ 2.8mA/ $\mu$ s)	3 $\mu$ A/ $\mu$ s (840 $\mu$ A ~ 8.4mA/ $\mu$ s)	NA
		50nA/ $\mu$ s (14 $\mu$ A ~ 140 $\mu$ A/ $\mu$ s)	0.1 $\mu$ A/ $\mu$ s (28 $\mu$ A ~ 280 $\mu$ A/ $\mu$ s)	0.3 $\mu$ A/ $\mu$ s (84 $\mu$ A ~ 840 $\mu$ A/ $\mu$ s)	NA
		5nA/ $\mu$ s (1.4 $\mu$ A ~ 14 $\mu$ A/ $\mu$ s)	10nA/ $\mu$ s (2.8 $\mu$ A ~ 28 $\mu$ A/ $\mu$ s)	30nA/ $\mu$ s (8.4 $\mu$ A ~ 84 $\mu$ A/ $\mu$ s)	NA
		0.5nA/ $\mu$ s (0.14 $\mu$ A ~ 1.4 $\mu$ A/ $\mu$ s)	1nA/ $\mu$ s (0.28 $\mu$ A ~ 2.8 $\mu$ A/ $\mu$ s)	3nA/ $\mu$ s (0.84 $\mu$ A ~ 8.4 $\mu$ A/ $\mu$ s)	NA
<b>Meter</b>					
Voltmeter	Accuracy	$\pm (0.1\%red+0.1\%fs)$	$\pm (0.1\%red+0.1\%fs)$	$\pm (0.1\%red+0.1\%fs)$	$\pm(0.1\%red+0.1\%fs) TYP$
Ammeter	Accuracy	$\pm (0.2\%red+0.3\%fs)$	$\pm (0.2\%red+0.3\%fs)$	$\pm (0.2\%red+0.3\%fs)$	NA
Ammeter	Parallel Accuracy TYP	$\pm (1.2\%red+1.1\%fs)$			$\pm(1.2\%red+1.1\%fs) TYP$
<b>Dynamic mode</b>					

Operation Mode		CC、CR、CP	CC、CR、CP	CC、CR、CP	NA
T1 & T2		0.025ms ~ 10ms : 1μs	0.025ms ~ 10ms : 1μs	0.025ms ~ 10ms : 1μs	NA
		10ms ~ 60s : 1ms	10ms ~ 60s : 1ms	10ms ~ 60s : 1ms	NA
Accuracy		±100ppm of setting	±100ppm of setting	±100ppm of setting	±100ppm of setting
Slew Rate(CC)	H	0.140mA/us ~ 140.0mA	0.280mA/us ~ 280.0mA/us	0.840mA/us ~ 840.0mA/us	NA
	M	0.014mA/us ~ 14.00mA	0.028mA/us ~ 28.00mA/us	0.084mA/us ~ 84.00mA/us	NA
	L	1.400uA/us ~ 1400.0uA	2.800uA/us ~ 2800uA/us	0.0084mA/us ~ 8.400mA/us	NA
Slew Rate(CR)	H	0.014mA/us ~ 14.000mA	0.028mA/us ~ 28.00mA/us	0.084mA/us ~ 84.00mA/us	NA
	M	0.0014mA/us ~ 1.4000mA	0.028mA/us ~ 2.800mA/us	0.0084mA/us ~ 8.400mA/us	NA
	L	0.1400uA/us ~ 140.00uA	0.280uA/us ~ 280.0uA/us	0.00084mA/us ~ 0.8400mA/us	NA
Current Accuracy		±0.4%F.S			
<b>PROTECTION FUNCTION</b>					
Functions		Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)			
<b>General</b>					
Input Range		90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz			
Power(Max.)		90VA	110VA	190VA	230VA
Interface		Std: USB, RS-232, Analog Control; Opt: GPIB/LAN			
Dimensions(mm) & Weight		213.8(W) x 124(H) x 400.5(D), Approx. 6kg	213.8(W) x 124(H) x 400.5(D), Approx. 7kg	427.8(W) x 124(H) x 400.5(D), Approx. 17kg	427.7(W) x 127.8(H) x 553.5(D), Approx. 23kg

**PEL-3212H / PEL-3323H / PEL-3424H / PEL-3535H**

Model		PEL-3212H	PEL-3323H	PEL-3424H	PEL-3535H
Operating voltage(DC)		0V~800V	0V~800V	0V~800V	0V~800V
Current		0~105A	0~157.5A	0~210A	0~262.5A
Power		2100W	3150W	4200W	5250W
Input Resistance		1.62MΩ	1.08MΩ	0.81MΩ	0.648MΩ
Min. Operating Voltage(DC)(Typ.)		5V at 105A 2.5V at 52.5A	5V at 157.5A 2.5V at 78.75A	5V at 210A 2.5V at 105A	5V at 262.5A 2.5V at 131.25A
<b>CC mode</b>					
Operating range	H	0A~105A	0~157.5A	0~210A	0~262.5A
	M	0A~10.5A	0A~15.75A	0~21A	0~26.25A
	L	0A~1.05A	0A~1.575A	0~2.1A	0~2.625A
Accuracy of setting	H,M	$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2} / 3.24M\Omega^{*3}$			
	L	$\pm(0.2\% \text{ of set} + 0.1\% \text{ of f.s.}) + V_{in}^{*2} / 3.24 M\Omega$			
Resolution	H	4mA	6mA	8mA	10mA
	M	0.4mA	0.6mA	0.8mA	1mA
	L	0.04mA	0.06mA	0.08mA	0.1mA
<b>CR mode</b>					
Operating range <sup>*4</sup>	H	21S~360uS(47.619mΩ~2.778kΩ)	31.5S~540uS(31.746mΩ~1.85185kΩ)	42S~0.72mS(23.8095mΩ~1.3889kΩ)	52.5S~0.9mS(19.0476mΩ~1.1111kΩ)
	M	2.1S~36uS(476.19mΩ~27.778kΩ)	3.15S~540uS(317.46mΩ~18.5185kΩ)	4.2S~0.72mS(238.095mΩ~13.8889kΩ)	5.25S~0.9mS(190.476mΩ~11.1111kΩ)
	L	210mS~3.6uS(4.7619Ω~277.78kΩ)	315mS~540uS(3.1746Ω~185.185kΩ)	420mS~0.72mS(2.38095Ω~138.888kΩ)	525mS~0.9mS(1.90476Ω~111.111kΩ)
Accuracy of setting <sup>*5</sup>	H,M	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*1}) + V_{in}^{*2} / 3.24M\Omega$ : Alone operation specifications			
	L	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}) + V_{in}^{*2} / 3.24M\Omega$ : Alone operation specifications			

Resolution	H	360uS	540uS	720uS	900uS
	M	36uS	54uS	72uS	90uS
	L	3.6uS	5.4uS	7.2uS	9uS
<b>CV mode</b>					
Operating range	H	5V~800V	5V~800V	5V~800V	5V~800V
	L	5V~80V	5V~80V	5V~80V	5V~80V
Accuracy of setting <sup>*7</sup>	H,L	$\pm(0.2\% \text{ of set} + 0.2\% \text{ of f.s})$			
Resolution	H	20mV			
	L	2mV			
<b>CP mode</b>					
Operating range	H	210W~2100W	315W~3150W	420W~4200W	525W~5250W
	M	21W~210W	31.5W~315W	42W~420W	52.5W~525W
	L	2.1W~21W	3.15W~31.5W	4.2W~42W	5.25W~52.5W
Setting range	H	0W~2100W	0W~3150W	0W~4200W	0W~5250W
	M	0W~210W	0W~315W	0W~420W	0W~525W
	L	0W~21W	0W~31.5W	0W~42W	0W~52.5W
Accuracy of setting <sup>*8</sup>	H,M	$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}^{*3}) + \text{Vin} \cdot \text{Vin}^{*3} / 3.24 \text{ M}\Omega$ : Alone operation specifications			
	L	$\pm(0.6\% \text{ of set} + 1.4\% \text{ of f.s}) + \text{Vin} \cdot \text{Vin}^{*3} / 3.24 \text{ M}\Omega$ : Alone operation specifications			
Resolution	H	200mW	300mW	400mW	500mW
	M	20mW	30mW	40mW	50mW
	L	2mW	3mW	4mW	5mW
<b>Slew rate</b>					
Operation Mode		CC、CR	CC、CR	CC、CR	CC、CR
Setting range (CC mode)	H	1.68mA/us~840mA/us	2.52mA/us~839.7mA/us	3.36mA/us~840mA/us	4.2mA/us~840mA/us
	M	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	L	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
Setting range (CR mode)	H	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	M	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
	L	1.68uA/us~840uA/us	2.52uA/us~839.7uA/us	3.36uA/us~840uA/us	4.2uA/us~840uA/us
Accuracy of setting <sup>*9</sup>	$\pm(10\% \text{ of set} + 25\text{us})$				
Resolution	600uA(168mA/us~840mA/us)		900uA(252mA/us~839.7mA/us)	1.2mA(336mA/us~840mA/us)	1.5mA(420mA/us~840mA/us)

Resolution		60uA(16.8mA/us~84mA/us)	90uA(25.2mA/us~83.97mA/us)	120uA(33.6mA/us~84mA/us)	150uA(42mA/us~84mA/us)
Resolution		6uA(1.68mA/us~8.4mA/us)	9uA(2.52mA/us~8.3.97mA/us)	12uA(3.36mA/us~8.4mA/us)	15uA(4.2mA/us~8.4mA/us)
Resolution		600nA(0.1680mA/us~84mA/us)	900nA(252nA/us~83.97mA/us)	1.2uA(336uA/us~84mA/us)	1.5uA(420uA/us~84mA/us)
Resolution		60nA(0.01680mA/us~8.4mA/us)	90nA(25.2uA/us~8.397mA/us)	120nA(33.6uA/us~8.4mA/us)	150nA(42uA/us~8.4mA/us)
Resolution		6nA(0.001680mA/us~0.84mA/us)	9nA(2.52uA/us~0.8397mA/us)	12nA(3.36uA/us~0.84mA/us)	15nA(4.2uA/us~0.84mA/us)
<b>Meter</b>					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)			
Ammeter	Accuracy	±(1.2 % of rdg + 1.1 % of f.s)			
<b>Dynamic mode</b>					
Operation mode	CC and CR				
T1&T2	0.025ms ~ 10ms / Res : 1us				
	10ms ~ 30s / Res : 1ms				
Accuracy	1uS / 1mS ± 100ppm				
Slew Rate Setting range (CC mode)	H	1.68mA/us~840mA/us	2.52mA/us~839.7mA/us	3.36mA/us~840mA/us	4.2mA/us~840mA/us
	M	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	L	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
Slew Rate Setting range (CR mode)	H	168uA/us~84mA/us	252uA/us~83.97mA/us	336uA/us~84mA/us	420uA/us~84mA/us
	M	16.8uA/us~8.4mA/us	25.2uA/us~8.397mA/us	33.6uA/us~8.4mA/us	42uA/us~8.4mA/us
	L	1.68uA/us~840uA/us	2.52uA/us~839.7uA/us	3.36uA/us~840uA/us	4.2uA/us~840uA/us
Current Accuracy	±0.4%F.S.				
<b>PROTECTION FUNCTION</b>					
Functions	Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)				
<b>General</b>					
Input Range	90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz				
Power(Max.)	380VA	570VA	760VA	950VA	
Interface	Std: USB, RS-232, Analog Control; Opt: GPIB/LAN				
Dimensions(mm) & Weight	598(W) x 611(H) x 706(D), Approx. 67.5kg	598(W) x 611(H) x 706(D), Approx. 85.5kg	598(W) x 877(H) x 706(D), Approx. 110kg	598(W) x 877(H) x 706(D), Approx. 127.5kg	



**PEL-3322H / PEL-3533H / PEL-3744H / PEL-3955H**

Model		PEL-3322H	PEL-3533H	PEL-3744H	PEL-3955H
Operating voltage(DC)		0V~800V	0V~800V	0V~800V	0V~800V
Current		0~157.5A	0~262.5A	0~367.5A	0~472.5A
Power		3150W	5250W	7350W	9450W
Input Resistance		3.24MΩ	3.24MΩ	3.24MΩ	3.24MΩ
Min. Operating Voltage(DC)(Typ.)		5V at 157.5A 2.5V at 78.75A	5V at 262.5A 2.5V at 131.25A	5V at 367.5A 2.5V at 183.75A	5V at 472.5A 2.5V at 236.25A
<b>CC mode</b>					
Operating range	H	0~157.5A	0~262.5A	0~367.5A	0~472.5A
	M	0~15.75A	0~26.25A	0~36.75A	0~47.25A
	L	0~1.575A	0~2.625A	0~3.675A	0~4.725A
Accuracy of setting	H,M	$\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/3.24\text{M}\Omega^{*3}$			
	L	$\pm(1.2\% \text{ of set} + 1.1\% \text{ of f.s.}) + V_{in}^{*2}/3.24\text{M}\Omega$			
Resolution	H	6mA	10mA	14mA	18mA
	M	0.6mA	1mA	1.4mA	1.8mA
	L	0.06mA	0.1mA	0.14mA	0.18mA
<b>CR mode</b>					
Operating range <sup>*4</sup>	H	31.5S~540uS(31.746mΩ~1.85185kΩ)	52.5S~0.9mS(19.0476mΩ~1.11111kΩ)	73.5S~1.26mS(13.6054mΩ~793.651Ω)	94.5S~1.26mS(10.582mΩ~617.284Ω)
	M	3.15S~540uS(317.46mΩ~18.5185kΩ)	5.25S~0.9mS(190.476mΩ~11.1111kΩ)	7.35S~126uS(136.054mΩ~7.93651kΩ)	9.45S~126uS(105.82mΩ~6.17284kΩ)
	L	315mS~540uS(3.1746Ω~185.185kΩ)	525mS~0.9mS(1.90476Ω~111.111kΩ)	735mS~12.6uS(1.36054Ω~79.3651kΩ)	945mS~162uS(1.0582Ω~61.7284kΩ)
Accuracy of setting <sup>*5</sup>	H,M	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}^{*1}) + V_{in}^{*2}/3.24\text{M}\Omega$ : Alone operation specifications			
	L	$\pm(0.5\% \text{ of set}^{*6} + 0.5\% \text{ of f.s.}) + V_{in}^{*2}/3.24\text{M}\Omega$ : Alone operation specifications			
Resolution	H	540uS	900uS	1.26mS	1.62mS
	M	54uS	90uS	126uS	162uS
	L	5.4uS	9uS	12.6uS	16.2uS
<b>CV mode</b>					
Operating range	H	5V~800V	5V~800V	5V~800V	5V~800V
	L	5V~80V	5V~80V	5V~80V	5V~80V

Accuracy of setting <sup>*7</sup>	H,L	±(0.2 % of set + 0.2 % of f.s)			
Resolution	H	20mV			
	L	2mV			
<b>CP mode</b>					
Operating range	H	315W~3150W	525W~5250W	735W~7350W	945W~9450W
	M	31.5W~315W	52.5W~525W	73.5W~735W	94.5W~945W
	L	3.15W~31.5W	5.25W~52.5W	7.35W~73.5W	9.45W~94.5W
Setting range	H	0W~3150W	0W~5250W	0W~7350W	0W~9450W
	M	0W~315W	0W~525W	0W~735W	0W~945W
	L	0W~31.5W	0W~52.5W	0W~73.5W	0W~94.5W
Accuracy of setting <sup>*8</sup>	H,M	±(0.6 % of set + 1.4 % of f.s <sup>*3</sup> ) + Vin*Vin <sup>*3</sup> /3.24MΩ : Alone operation specifications			
	L	±(0.6 % of set + 1.4 % of f.s) + Vin*Vin <sup>*3</sup> /3.24MΩ : Alone operation specifications			
Resolution	H	300mW	500mW	700mW	900mW
	M	30mW	50mW	70mW	90mW
	L	3mW	5mW	7mW	9mW
<b>Slew rate</b>					
Operation Mode		CC、CR	CC、CR	CC、CR	CC、CR
Setting range (CC mode)	H	2.52mA/us~839.7mA/us	4.2mA/us~840mA/us	5.88mA/us~840mA/us	7.56mA/us~839.7mA/us
	M	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
	L	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
Setting range (CR mode)	H	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
	M	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	L	2.52uA/us~839.7uA/us	4.2uA/us~840uA/us	5.88uA/us~840uA/us	7.56uA/us~839.7uA/us
Accuracy of setting <sup>*9</sup>		±(10% of set + 25us)			
Resolution		900uA(252mA/us~839.7mA/us)	1.5mA(420mA/us~840mA/us)	2.1mA(588mA/us~840A/us)	2.7mA(756mA/us~839.7mA/us)
Resolution		90uA(25.2mA/us~83.97mA/us)	150uA(42mA/us~84mA/us)	210uA(58.8mA/us~84mA/us)	270uA(75.6mA/us~83.97mA/us)
Resolution		9uA(2.52mA/us~8.397mA/us)	15uA(4.2mA/us~8.4mA/us)	21uA(5.88mA/us~8.4mA/us)	27uA(7.56mA/us~8.397mA/us)
Resolution		900nA(252nA/us~83.97mA/us)	1.5uA(420uA/us~84mA/us)	2.1uA(588uA/us~84mA/us)	2.7uA(756uA/us~83.97mA/us)
Resolution		90nA(25.2uA/us~8.397mA/us)	150nA(42uA/us~8.4mA/us)	210nA(58.8uA/us~8.4mA/us)	270nA(75.6uA/us~8.397mA/us)
Resolution		9nA(2.52uA/us~0.8397mA/us)	15nA(4.2uA/us~0.84mA/us)	21nA(5.88uA/us~0.84mA/us)	27nA(7.56uA/us~0.8397mA/us)
<b>Meter</b>					
Voltmeter	Accuracy	±(0.1 % of rdg + 0.1 % of f.s)			
Ammeter	Accuracy	±(1.2 % of rdg + 1.1 % of f.s)			

Dynamic mode					
Operation mode		CC and CR			
T1&T2		0.025ms ~ 10ms / Res : 1us			
		10ms ~ 30s / Res : 1ms			
Accuracy		1uS / 1mS ± 100ppm			
Slew Rate Setting range (CC mode)	H	2.52mA/us~839.7mA/us	4.2mA/us~840mA/us	5.88mA/us~840mA/us	7.56mA/us~839.7mA/us
	M	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
Slew Rate Setting range (CR mode)	L	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	H	252uA/us~83.97mA/us	420uA/us~84mA/us	588uA/us~84mA/us	756uA/us~83.97mA/us
Slew Rate Setting range (CR mode)	M	25.2uA/us~8.397mA/us	42uA/us~8.4mA/us	58.8uA/us~8.4mA/us	75.6uA/us~8.397mA/us
	L	2.52uA/us~839.7uA/us	4.2uA/us~840uA/us	5.88uA/us~840uA/us	7.56uA/us~839.7uA/us
Current Accuracy		±0.4%F.S.			
PROTECTION FUNCTION					
Functions		Overvoltage protection(OVP), Overcurrent protection(OCP), Overpower protection(OPP), Overheat protection(OHP), Undervoltage protection(UVP), Reverse connection protection(REV)			
General					
Input Range		90VAC ~ 132VAC/ 180VAC ~ 250VAC Single-phase ; 47Hz~63Hz			
Power(Max.)		420VA	650VA	880VA	1110VA
Interface		Std: USB, RS-232, Analog Control; Opt: GPIB/LAN			
Dimensions(mm) & Weight		598(W) x 611(H) x 706(D), Approx. 73kg	598(W) x 611(H) x 706(D), Approx. 96.5kg	598(W) x 877(H) x 706(D), Approx. 125kg	598(W) x 877(H) x 706(D), Approx. 149kg

\*1 Full scale of H range

\*2 Vin: input terminal voltage of electronic load

\*3 M range applies to the full scale of H range

\*4 Siemens[S] = Input current[A] / Input voltage[V] = 1 / resistance[Ω]

\*5 Converted value at the input current. At the input current. It is not applied for the condition of the parrallel operation.

\*6 set = Vin / Rset

\*7 At the sensing point during remote sensing under the operating range of the input voltage. It is also applied for the condition of the parrallel operation.

\*8 It is not applied for the condition of the parrallel operation.

\*9 Time to reach from 10 % to 90 % when the current is varied from 2 % to 100 % (20 % to 100 % in M range) of the rated current.