

## SPECIFICATIONS

Model	3430SE		3431UE		3431SE	
Power	5 KW	5 KW	10 KW	10 KW	15 KW	15 KW
Current	0 A to 2.5 A	0 A to 25 A	0 A to 5 A	0 A to 50 A	0 A to 7.5 A	0 A to 75 A
Voltage			0 V to 1250 V			
Protections						
Over Power Protection(OPP)			105 %			
Over Current Protection(OCP)			104 %			
Over Voltage Protection(OVP)			104 %			
Over Temp Protection(OTP)			YES			
Constant Current Mode						
Range <sup>*1</sup>	2.5 A	25 A	5.00 A	50 A	7.5 A	75 A
Resolution	0.04 mA	0.4 mA	0.08 mA	0.8 mA	0.12 mA	1.2 mA
Accuracy <sup>*2</sup>			$\pm 0.05\%$ of (Setting + Range)			
Constant Resistance Mode						
Range	60000 Ω to 50 Ω	50 Ω to 2,502 Ω	30000 Ω to 25 Ω	25 Ω to 1,251 Ω	20004 Ω to 16.67 Ω	16.67 Ω to 0.834 Ω
Resolution	0.3334 μS	0.834 mΩ	0.6667 μS	0.417 mΩ	0.9998 μS	0.278 mΩ
Accuracy			$\pm 0.2\%$ of (Setting + Range)			
Constant Voltage Mode						
Range	1250 V		1250 V		1250 V	
Resolution	20 mV		20 mV		20 mV	
Accuracy	$\pm 0.05\%$ of (Setting + Range)					
Constant Power Mode						
Range	500 W	5000 W	1000 W	10000 W	1500 W	15000 W
Resolution	8 mW	80 mW	16 mW	160 mW	24 mW	240 mW
Accuracy <sup>*3</sup>			$\pm 0.1\%$ of (Setting + Range)			
Constant Voltage + Current Limit Mode						
Range	1250 V	25 A	1250 V	50 A	1250 V	75 A
Resolution	20 mV	0.4 mA	20 mV	0.8 mA	20 mV	1.2 mA
Accuracy	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)
Constant Voltage + Power Limit Mode						
Range	1250 V	5000 W	1250 V	10000 W	1250 V	15000 W
Resolution	20 mV	80 mW	20 mV	160 mW	20 mV	240 mW
Accuracy	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)
MPPT Mode						
Algorithm	P&O					
Load mode	CV					
P&O interval	1000 ms to 60000 ms ; resolution 1000 ms					
Dynamic Mode						
Timing						
Thigh & Tlow	0.050 ms to 9,999 ms / 99.9 ms / 999.9 ms					
Resolution	0.001 ms / 0.01 ms / 0.1 ms / 1 ms					
Accuracy	1 μs / 10 μs / 100 μs / 1 ms + 50 ppm					
Slew rate	0.002 A/μs to 0.125 A/μs	0.02 A/s to 1.25 A/μs	0.004 A/μs to 0.25 A/μs	0.04 A/μs to 2.5A/μs	0.006 A/μs to 0.375 A/μs	0.06 A/μs to 3.75 A/μs
Resolution	0.0005 A/μs	0.005 A/μs	0.001 A/μs	0.01 A/μs	0.0015 A/μs	0.015 A/μs
Min. Rise Time	20 μs (typical)					
Accuracy	$\pm (5\% \text{ of Setting}) \pm 10 \mu\text{s}$					
Current						
Range	0 A to 2.5 A	2.5 A to 25 A	0 A to 5 A	5 A to 50 A	0 A to 7.5 A	7.5 A to 75 A
Resolution	0.04 mA	0.4 mA	0.08 mA	0.8 mA	0.12 mA	1.2 mA
Measurement						
Voltage Read Back						
Range (5 Digital)	0 V to 125 V	125 V to 1250 V	0 V to 125 V	125 V to 1250 V	0 V to 125 V	125 V to 1250 V
Resolution	2 mV	20 mV	2 mV	20 mV	2 mV	20 mV
Accuracy	$\pm 0.025\%$ of (Reading + Range)					
Current Read Back						
Range (5 Digital)	0 A to 2.5 A	2.5 A to 25 A	0 A to 5 A	5 A to 50 A	0 A to 7.5 A	7.5 A to 75 A
Resolution	0.04 mA	0.4 mA	0.08 mA	0.8 mA	0.12 mA	1.2 mA
Accuracy	$\pm 0.05\%$ of (Reading + Range)					
Power Read Back						
Range (5 Digital)	500 W	5000 W	1000 W	10000 W	1500 W	15000 W
Resolution	0.1 W	1 W	0.1 W	1 W	0.1 W	1 W
Accuracy <sup>*4</sup>	$\pm 0.06\%$ of (Reading + Range)					
General						
Short Circuit						
Current	25 A		50 A		75 A	
Load On Voltage	1.0 V to 250 V					
Load OFF Voltage	0 V to 250 V					
Power Consumption	600 Wmax		1000 Wmax		1450 Wmax	
Dimension(HxWxD)	573 mm x 647 mm x 766 mm		573 mm x 647 mm x 766 mm		728 mm x 647 mm x 766 mm	
Weight	100 Kg		130 Kg		170 Kg	
Operating Range						
Temperature <sup>*5</sup>	0 °C to 40 °C					
Humidity	20 % to 85 %rh					
Storage Range						
Temperature	-20 °C to +70 °C					
Humidity	<= 90 %rh					
Withstanding Voltage Test						
AC input and FG	AC 1500 V, 1 minute.					
AC input and Load terminal	AC 3000 V, 1 minute.					
Load terminal and FG	AC 1500 V, 1 minute.					
Safety & EMC	CE					

Note <sup>\*1</sup> : The range is automatically or forcing to range II only in CC mode

Note <sup>\*2</sup> : If the operating current is below range 0.1 %, the accuracy specification is 0.1 % F.S.

Note <sup>\*3</sup> : If the operating voltage is higher than 600 V, the accuracy specification is 0.5 % F.S.

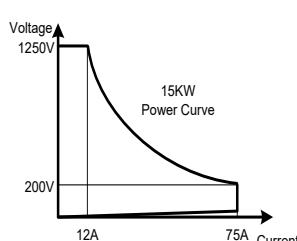
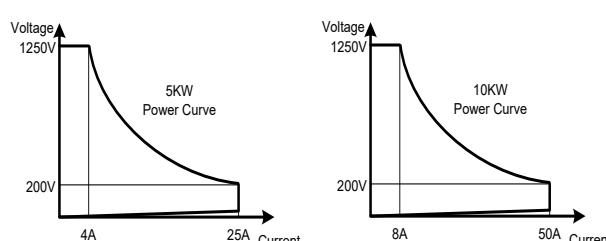
Note <sup>\*4</sup> : Power F.S. = Vrange F.S. x Irange F.S.

Note <sup>\*5</sup> : Operating temperature range is 0 °C to 40 °C, All specifications apply for 25 °C±5 °C, Except as noted

Input AC Power : 100 Vac to 230 Vac ± 10 %, 50/60 Hz

Cooling : Advanced Fan Cooled

All specifications are subject to change without notice.



## SPECIFICATIONS

Model	34320E		34325E		34330E	
Power	20 kW	20 kW	25 kW	25 kW	30 kW	30 kW
Current	0 A to 10 A	0 A to 100 A	0 A to 12.5 A	0 A to 125 A	0 A to 15 A	0 A to 150 A
Voltage				0 V to 1250 V		
Protections						
Over Power Protection(OPP)				105 %		
Over Current Protection(OCP)				104 %		
Over Voltage Protection(OVP)				104 %		
Over Temp Protection(OTP)				YES		
Constant Current Mode						
Range <sup>*1</sup>	10:00 AM	100 A	12.5 A	125 A	15 A	150 A
Resolution	0.16 mA	1.6 mA	0.2 mA	2 mA	0.24 mA	2.4 mA
Accuracy <sup>*2</sup>			$\pm 0.05\%$ of (Setting + Range)			
Constant Resistance Mode						
Range	15000 Ω to 12.5 Ω	12.5 Ω to 0.627 Ω	12000 Ω to 10 Ω	10 Ω to 0.501 Ω	9996 Ω to 8.33 Ω	8.33 Ω to 0.417 Ω
Resolution	1.3333 μS	0.209 mΩ	1.6667 μS	0.167 mΩ	2.0008 μS	0.139 mΩ
Accuracy			$\pm 0.2\%$ of (Setting + Range)			
Constant Voltage Mode						
Range	1250 V		1250 V		1250 V	
Resolution	20 mV		20 mV		20 mV	
Accuracy			$\pm 0.05\%$ of (Setting + Range)			
Constant Power Mode						
Range	2000 W	20000 W	2500 W	25000 W	3000 W	30000 W
Resolution	32 mW	320 mW	40 mW	400 mW	48 mW	480 mW
Accuracy <sup>*3</sup>			$\pm 0.1\%$ of (Setting + Range)			
Constant Voltage + Current Limit Mode						
Range	1250 V	100 A	1250 V	125 A	1250 V	150 A
Resolution	20 mV	1.6 mA	20 mV	2 mA	20 mV	2.4 mA
Accuracy	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)
Constant Voltage + Power Limit Mode						
Range	1250 V	20000 W	1250 V	25000 W	1250 V	30000 W
Resolution	20 mV	320 mW	20 mV	400 mW	20 mV	480 mW
Accuracy	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)	$\pm 0.05\%$ of (Setting + Range)	$\pm 1.0\%$ of (Setting + Range)
MPPT Mode						
Algorithm	P&O					
Load mode	CV					
P&O interval		1000 ms to 60000 ms ; resolution 1000 ms				
Dynamic Mode						
Timing						
Thigh & Tlow		0.050 ms to 9.999 ms / 99.99 ms / 999.9 ms / 9999 ms				
Resolution		0.001 ms / 0.01 ms / 0.1 ms / 1 ms				
Accuracy		1 μs / 10 μs / 100 μs / 1 ms + 50 ppm				
Slew rate	0.008 A/μs to 0.5 A/μs	0.08 A/μs to 5 A/μs	0.01 A/μs to 0.625 A/μs	0.1 A/μs to 6.25 A/μs	0.012 A/μs to 0.75 A/μs	0.12 A/μs to 7.5 A/μs
Resolution	0.002 A/μs	0.02 A/μs	0.002 5A/μs	0.025 A/μs	0.003 A/μs	0.03 A/μs
Min. Rise Time		20 μs (typical)				
Accuracy		$\pm (5\% \text{ of Setting}) \pm 10 \mu\text{s}$				
Current						
Range	0 A to 10 A	10 A to 100 A	0 A to 12.5 A	12.5 A to 125 A	0 A to 15 A	15 A to 150 A
Resolution	0.16 mA	1.6 mA	0.2 mA	2 mA	0.24 mA	2.4 mA
Measurement						
Voltage Read Back						
Range (5 Digital)	0 V to 125 V	125 V to 1250 V	0 V to 125 V	125 V to 1250 V	0 V to 125 V	125 V to 1250 V
Resolution	2 mV	20 mV	2 mV	20 mV	2 mV	20 mV
Accuracy		$\pm 0.025\%$ of (Reading + Range)				
Current Read Back						
Range (5 Digital)	0 A to 10 A	10 A to 100 A	0 A to 12.5 A	12.5 A to 125 A	0 A to 15 A	15 A to 150 A
Resolution	0.16 mA	1.6 mA	0.2 mA	2 mA	0.24 mA	2.4 mA
Accuracy		$\pm 0.05\%$ of (Reading + Range)				
Power Read Back						
Range (5 Digital)	2000 W	20000 W	2500 W	25000 W	3000 W	30000 W
Resolution	0.1 W	1 W	0.1 W	1 W	0.1 W	1 W
Accuracy <sup>*4</sup>		$\pm 0.06\%$ of (Reading + Range)				
General						
Short Circuit						
Current	100 A		125 A		150 A	
Load ON Voltage		1.0 V to 250 V				
Load OFF Voltage		0 V to 250 V				
Power Consumption	1900 W max		2350 W max		2800 W max	
Dimension(HxWxD)	885 mm x 647 mm x 766 mm		1047 mm x 647 mm x 766 mm		1197 mm x 647 mm x 766 mm	
Weight	220 Kg		280 Kg		340 Kg	
Operating Range						
Temperature <sup>*5</sup>		0 °C to 40 °C				
Humidity		20 % to 85 %rh				
Storage Range						
Temperature		-20 °C to +70 °C				
Humidity		<= 90 %rh				
Withstanding Voltage Test						
AC Input and FC		AC 1500 V, 1 minute.				
AC input and Load terminal		AC 3000 V, 1 minute.				
Load terminal and FG		AC 1500 V, 1 minute.				
Safety & EMC		CE				

Note <sup>\*1</sup> : The range is automatically or forcing to range II only in CC mode

Note <sup>\*2</sup> : If the operating current is below range 0.1 %, the accuracy specification is 0.1 % F.S.

Note <sup>\*3</sup> : If the operating voltage is higher than 600 V, the accuracy specification is 0.5 % F.S.

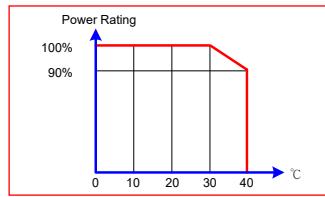
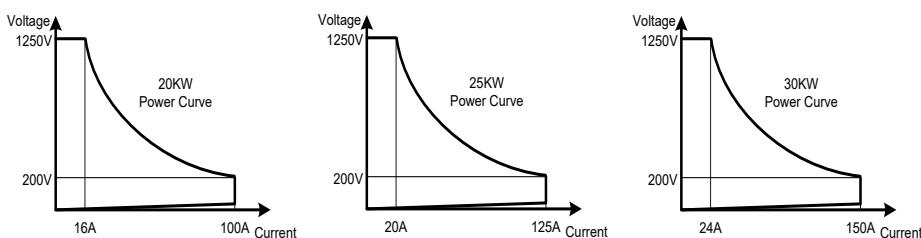
Note <sup>\*4</sup> : Power F.S. = Vrange F.S. x Irange F.S.

Note <sup>\*5</sup> : Operating temperature range is 0 °C to 40 °C, All specifications apply for 25 °C±5 °C, Except as noted

Input AC Power : 100 Vac to 230 Vac ± 10 %, 50/60 Hz

Cooling : Advanced Fan Cooled

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## SPECIFICATIONS

Model	34335E		34340E					
Power	35 KW	35 KW	40 KW	40 KW				
Current	0 A to 17.5 A	0 A to 175 A	0 A to 20 A	0 A to 200 A				
Voltage	0 V to 1250 V							
<b>Protections</b>								
Over Power Protection(OPP)	105 %							
Over Current Protection(OCP)	104 %							
Over Voltage Protection(OVP)	104 %							
Over Temp Protection(OTP)	YES							
<b>Constant Current Mode</b>								
Range *1	17.5 A	175 A	20 A	200 A				
Resolution	0.28 mA	2.8 mA	0.32 mA	3.2 mA				
Accuracy *2	$\pm 0.05\% \text{ of (Setting + Range)}$							
<b>Constant Resistance Mode</b>								
Range	8568 Ω to 7.14 Ω	7.14 Ω to 0.357 Ω	7500 Ω to 6.25 Ω	6.25 Ω to 0.315 Ω				
Resolution	2.334 μS	0.119 mΩ	2.6667 μS	0.105 mΩ				
Accuracy	$\pm 0.2\% \text{ of (Setting + Range)}$							
<b>Constant Voltage Mode</b>								
Range	1250 V		1250 V					
Resolution	20 mV		20 mV					
Accuracy	$\pm 0.05\% \text{ of (Setting + Range)}$							
<b>Constant Power Mode</b>								
Range	3500 W	35000 W	4000 W	40000 W				
Resolution	56 mW	560 mW	64 mW	640 mW				
Accuracy *3	$\pm 0.1\% \text{ of (Setting + Range)}$							
<b>Constant Voltage + Current Limit Mode</b>								
Range	1250 V	175 A	1250 V	200 A				
Resolution	20 mV	2.8 mA	20 mV	3.2 mA				
Accuracy	$\pm 0.05\% \text{ of (Setting + Range)}$	$\pm 1.0\% \text{ of (Setting + Range)}$	$\pm 0.05\% \text{ of (Setting + Range)}$	$\pm 1.0\% \text{ of (Setting + Range)}$				
<b>Constant Voltage + Power Limit Mode</b>								
Range	1250 V	35000 W	1250 V	40000 W				
Resolution	20 mV	560 mW	20 mV	640 mW				
Accuracy	$\pm 0.05\% \text{ of (Setting + Range)}$	$\pm 1.0\% \text{ of (Setting + Range)}$	$\pm 0.05\% \text{ of (Setting + Range)}$	$\pm 1.0\% \text{ of (Setting + Range)}$				
<b>MPPT Mode</b>								
Algorithm	P&O							
Load mode	CV							
P&O interval	1000 ms to 60000 ms ; resolution 1000 ms							
<b>Dynamic Mode</b>								
<b>Timing</b>								
Thigh & Tlow	0.050 ms to 9.999 ms / 99.99 ms / 999.9 ms / 9999 ms							
Resolution	0.001 ms / 0.01 ms / 0.1 ms / 1 ms							
Accuracy	1 μs / 10 μs / 100 μs / 1 ms + 50 ppm							
Slew rate	0.014 A/μs to 0.875 A/μs	0.14 A/μs to 8.75 A/μs	0.016 A/μs to 1 A/μs	0.16 A/μs to 10 A/μs				
Resolution	0.0035 A/μs	0.035 A/μs	0.002 A/μs	0.04 A/μs				
Min. Rise Time	20 μs (typical)							
Accuracy	$\pm (5\% \text{ of Setting}) \pm 10 \mu\text{s}$							
<b>Current</b>								
Range	0 A to 17.5 A	17.5 A to 175 A	0 A to 20 A	20 A to 200 A				
Resolution	0.28 mA	2.8 mA	0.32 mA	3.2 mA				
<b>Measurement</b>								
<b>Voltage Read Back</b>								
Range (5 Digital)	0 V to 125 V	125 V to 1250 V	0 V to 125 V	125 V to 1250 V				
Resolution	2 mV	20 mV	2 mV	20 mV				
Accuracy	$\pm 0.025\% \text{ of (Reading + Range)}$							
<b>Current Read Back</b>								
Range (5 Digital)	0 A to 17.5 A	17.5 A to 175 A	0 A to 20 A	20 A to 200 A				
Resolution	0.28 mA	2.8 mA	0.32 mA	3.2 mA				
Accuracy	$\pm 0.05\% \text{ of (Reading + Range)}$							
<b>Power Read Back</b>								
Range (5 Digital)	3500 W	35000 W	4000 W	40000 W				
Resolution	0.1 W	1 W	0.1 W	1 W				
Accuracy *4	$\pm 0.06\% \text{ of (Reading + Range)}$							
<b>General</b>								
<b>Short Circuit</b>								
Current	175 A		200 A					
Load ON Voltage	1.0 V to 250 V							
Load OFF Voltage	0 V to 250 V							
Power Consumption	3250 Wmax		3700 Wmax					
Dimension(HxWxD)	1353 mm x 647 mm x 766 mm		1509 mm x 647 mm x 766 mm					
Weight	390 Kg		430 Kg					
<b>Operating Range</b>								
Temperature *5	0 °C to 40 °C							
Humidity	20 % to 85 %rh							
<b>Storage Range</b>								
Temperature	-20 °C to +70 °C							
Humidity	<= 90 %rh							
<b>Withstanding Voltage Test</b>								
AC input and FC	AC 1500 V, 1 minute.							
AC input and Load terminal	AC 3000 V, 1 minute.							
Load terminal and FG	AC 1500 V, 1 minute.							
Safety & EMC	CE							

Note \*1 : The range is automatically or forcing to range II only in CC mode

Note \*2 : If the operating current is below range 0.1 %, the accuracy specification is 0.1 % F.S.

Note \*3 : If the operating voltage is higher than 600 V, the accuracy specification is 0.5 % F.S.

Note \*4 : Power F.S. = Vrange F.S. x Irange F.S.

Note \*5: Operating temperature range is 0 °C to 40 °C, All specifications apply for 25 °C±5 °C, Except as noted

Input AC Power : 100 Vac to 230 Vac ± 10 %, 50/60 Hz

Cooling : Advanced Fan Cooled

All specifications are subject to change without notice.

