

# Siemens Microinverter System

The Siemens Microinverter System improves energy harvest, increases reliability, and dramatically simplifies design, installation and management of solar power systems. The Siemens system includes the Microinverter, Trunk-and-Drop cables, the Envoy Communications Gateway, and the Enlighten monitoring and analysis website.



<b>Productive</b> <ul style="list-style-type: none"><li>■ Maximum energy production</li><li>■ Resilient to dust, debris and shading</li><li>■ Performance monitoring per module</li></ul>	<b>Smart</b> <ul style="list-style-type: none"><li>■ Quick &amp; simple design, installation and management</li><li>■ 24/7 monitoring and analysis</li></ul>
<b>Reliable</b> <ul style="list-style-type: none"><li>■ System availability greater than 99.8%</li><li>■ No single point of system failure</li></ul>	<b>Safe</b> <ul style="list-style-type: none"><li>■ Low voltage DC</li><li>■ Reduced fire risk</li></ul>

Data Sheet

[www.usa.siemens.com/microsolar](http://www.usa.siemens.com/microsolar)

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# Microinverter technical data

Input Data (DC)		SMIINV215R60xx SMII215R60xxCA (Ontario)	
Recommended maximum input power (STC)	190 - 260 W		
Maximum input DC voltage	45 V		
Peak power tracking range	22 V – 36 V		
Operating range	16 V – 36 V		
Min./Max. start voltage	22 V / 45 V		
Max. DC short circuit current	15 A		
Max. input current	10.5 A		
Output Data (AC)	@208 V ac	@240 V ac	
Maximum output power	215 W	215 W	
Nominal output current	1.0 A*	0.9 A*	
Nominal voltage / range	208 V / 183 V - 229 V	240 V / 211 V - 264 V	
Extended voltage / range	208 V / 179 V - 232 V	240 V / 206 V - 269 V	
Nominal frequency / range	60.0 / 59.3 - 60.5 Hz	60.0 / 59.3 - 60.5 Hz	
Extended frequency / range	60.0 / 59.2 - 60.6 Hz	60.0 / 59.2 - 60.6 Hz	
Power factor	> 0.95	> 0.95	
Maximum units per 20 A branch circuit	25 (three phase)	17 (single phase)	
Maximum output fault current	1.05 A <sub>RMS</sub> , over 3 cycles; 25.2 A <sub>peak</sub> , 1.74 ms duration		
	*A <sub>RMS</sub> at nominal voltage		
Efficiency			
CEC weighted efficiency	96.0%		
Peak inverter efficiency	96.3%		
Static MPPT efficiency (weighted, reference EN50530)	99.6%		
Dynamic MPPT efficiency (fast irradiation changes, reference EN50530)	99.3%		
Night time power consumption	46 mW		
Mechanical Data			
Operating temperature range	-40° C to +85° C		
Ambient temperature range	-40° C to +65° C		
Dimensions (W x H x D)	17.3 cm x 16.4 cm x 2.5 cm (6.8" x 6.45" x 1.0")*		
Weight	1.6 kg (3.5 lbs)		
Cooling	Natural convection – no fans		
Enclosure environmental rating	Outdoor – NEMA 6		
	*without mounting bracket		
Features			
Compatibility	Pairs with most 60-cell PV modules		
Communication	Power line		
Warranty	25 Years		
Compliance	UL1741/IEEE1547, FCC Part 15 Class B CAN/CSA-C22.2 NO. 0-M91, 0.4-04, and 107.1-01		

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Subject to change without prior notice  
Order No.: RPFL-MIINV-1211  
Printed in USA  
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