



# LV5+ Solar Inverter Data Sheet



GE has accumulated more than 7.5 gigawatts of total global installed base for its solar inverter technology, and was the first to introduce 1,500-volt to the solar market.

GE's LV5+ Solar Inverter builds on proven power electronics technology, demonstrated global manufacturing experience and an extensive global installed base.

**The LV5+ Solar Inverter is designed to integrate into GE's plug & play LV5+ Solar Power Station for efficient, cost effective and dispatchable solar power.**

## LV5+ Solar Inverter Features:

- UL or IEC compliant configurations
- 2.7 - 3.5 MW output power
- High efficiency
- Filter-less air-cooling system
- Plug & play
- Night time disconnect option
- Direct outdoor installation
- Containerized for optimized logistics and reduced on site installation and commissioning
- Fibre-optic SCADA interface
- Digital APM ready

## 1. LV5+ 1500V Solar Inverter Data

Specifications	Units	LV5+ 1560 Solar Inverter	LV5+ 1563 Solar Inverter	LV5+ 1566 Solar Inverter	LV5+ 1569 Solar Inverter
<b>Input Data</b>					
MPPT Range <sup>1</sup>	Vdc	851 - 1300	893 - 1300	936 - 1300	978 - 1300
Max Permissible DC Voltage	Vdc	1500			
Max Continuous DC Current (at 35°C / 50°C)	Adc	4000 / 3200			
Max DC Short Circuit Interrupt Rating	Adc	12000 <sup>2</sup>			
Number of MPPT		1			
Number of DC Inputs		up to 24			
<b>Output Data - Low Voltage</b>					
Active AC Output Power (PF=1) <sup>3</sup> (at 35°C / 50°C)	MW	3.12 / 2.76	3.27 / 2.90	3.43 / 3.04	3.59 / 3.17
AC Output Voltage (+10% / -10%) <sup>4</sup>	Vac	600	630	660	690
Max AC Current (at 35°C / 50°C)	Aac	3000 / 2655			
Grid Frequency ±5%	Hz	50 / 60			
Power Factor (PF) Range		0 - 1 <sup>3</sup>			
Current Harmonic Distortion (TDD)	%	<3			
<b>Efficiency &amp; Auxiliary Power</b>					
Inverter Efficiency (Max / EU / CEC) <sup>5</sup>	%	98.9 / 98.6 / 98.7			
Nighttime Aux Power <sup>6</sup>	W	≤200			
<b>Interfaces</b>					
Plant Control Interface / PLC		EtherNet IP / Modbus TCP, OPCUA, EGD			
Programming / Diagnostic Interface		EtherNet IP / Modbus TCP, OPCUA			
Extra Analog and Digital I/O		Option			
<b>Features</b>					
Cooling		Air Cooled			
Emergency Shut Down		Included			
Mounting Options		Piers / Pad / Gravel			
Array Configurations Supported		Negative Pole Grounded or Floating			
Ground Fault Monitoring		Standard for Grounded Arrays, Option for Floating Arrays			
Nighttime VAR Function		Option			

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Insulation Monitoring		Option			
Power Disconnect AC Side		Motorized AC Circuit Breaker			
Switch-Disconnect DC Side		Motorized DC Switch			
Overvoltage Protection, DC and AC		Included – IEC 61643-1 Class II / UL 1449			
Weather Station		Option			
Noise (at 1m / 10m) <sup>7</sup>	dB(A)	≤85 / ≤75			
Weight	kg / lbs	approx. 4050 / 8930			
Dimensions (L x W x H)	m / ft	2.0 x 2.4 x 2.9 / 6.5 x 8.0 x 8.5			
<b>Protection Rating and Ambient Conditions</b>					
Operating Temperature Range	°C	-25 to +50			
Storage Temperature Range	°C	-40 to +65			
Cold Weather Option <sup>8</sup>	°C	-35 to +50			
Humidity	%	5 to 100 (rated for outdoor installation)			
Maximum Altitude Without Derating <sup>9</sup>	m / ft	2000 / 6562			
Seismic		Zone 2B ASCE 7 / IBC			
Maximum Wind Speed <sup>10</sup>	kph / mph	250 / 155			
Snow Load		ASCE 7			
NEMA Rating / IP Class		NEMA3 / IP54			
<b>Standards</b>					
Electromagnetic Compatibility (EMC)		EN 61000-6-2, 62920 / CISPR 11			
Certifications		IEC, CE, UL 1741 SA			

<sup>1</sup> At nominal voltage, ideal grid conditions and PF=1 (at 50°C)

<sup>2</sup> Up to 5 times per lifetime

<sup>3</sup> Implies active power reduction, Altitude ≤ 2000m, grid voltage ≥ nominal voltage

<sup>4</sup> Derating will apply according to PQ curves

<sup>5</sup> Preliminary, excludes auxiliary power losses

<sup>6</sup> No heating, no cooling, without environmental controls enabled & DC link de-energized

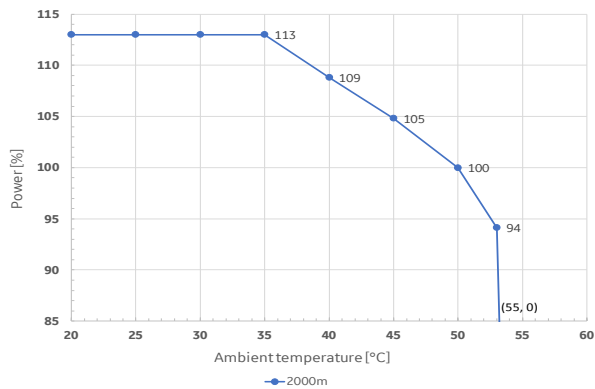
<sup>7</sup> At 1m / 10m in front of enclosure and 1m up from the ground

<sup>8</sup> Cold weather option on request

<sup>9</sup> Higher altitudes (with derating) on request

<sup>10</sup> Maximum wind speed without derating 81 kph / 50 mph

## 2. Derating Curve (Altitude and Temperature)<sup>11</sup>



<sup>11</sup> Applicable for grid voltage ≥ nominal voltage, altitudes >2000m on request