



## LV5-1510-20-UL-SLR

### 1MW INVERTER DATASHEET

#### GE Power Conversion

We are applying the science and systems of power conversion to drive the electric transformation of the world's energy infrastructure.



electrifying change

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## 1. GE 1500V 1MW INVERTER DATA SHEET

Specifications	Units	Nominal
<b>Input Data</b>		
MPPT Range (35°C) 50°C	DC V	(890) 850-1300
Max permissible DC voltage	DC V	1500
Maximum continuous DC current (IEC/UL)	DC A	1200
Max DC short circuit current	DC A	4800
Number of MPPT		1
Number of DC inputs		Total 8/16 circuits
<b>Output Data</b>		
AC output power (35°C/50°C)	kVA	1050/1000
Operating grid voltage +/-10% <sup>1</sup>	Vac	550
Maximum AC current (35°C/50°C)	Aac	1100/1050
Grid frequency ±5%	Hz	50/60
Current harmonic distortion (TDD)	%	< 3
Power factor range		0-1 inductive or capacitive
<b>Efficiency</b>		
Maximum efficiency <sup>2</sup>	%	98,6
Weighted CEC efficiency <sup>2</sup> @850V DC	%	98,4
Weighted Euro efficiency <sup>2</sup> @850V DC	%	98,3
<b>Dimensions and weights</b>		
Width / Height / Depth (1 DC Cubicle)	m (ft)	3.06 (10.04) / 2.14 (7.02) / .67 (2.20)
Width / Height / Depth (2 DC Cubicles)	m (ft)	3.86 (12.66) / 2.14 (7.02) / .67 (2.20)
Weight	kg (Lbs)	1850 (4079)
<b>Auxiliary Power</b>		
Voltage	V	400, 3-ph
Self-consumption in operation @ Pac,r and 25°C / 50°C ambient	W	2700W / 3500W
Self-consumption / standby mode	W	<100 W
<b>Interfaces</b>		
Plant control interface / PLC		EtherNet IP / Modbus TCP
Programming / Diagnostic interface		Ethernet, Protocol: TCP/IP
Programming / Diagnostic interface (Local)		Ethernet, Protocol: TCP/IP
<b>Protection rating and ambient conditions</b>		
Operating temperature range	°C (°F)	-20 to +55 (-4 to +131) <sup>3</sup>
Cold weather option	°C (°F)	-35 (-31) <sup>4</sup>
Storage temperature with coolant (NCV/CCV)	°C (°F)	-20/-35 to +65 (-4/-31 to 149)
Humidity		Suitable for outdoor operation
Maximum altitude without deration	m (ft)	1000 (3280)
Maximum altitude with deration	m (ft)	4000 (13123)
Maximum ambient temperature @500kVA	°C (°F)	55 <sup>3</sup>
Ingress protection		IP 55 / Nema 3R

<sup>1</sup> Rated power at nominal grid voltage and above

<sup>2</sup> Excluding auxiliaries

<sup>3</sup> See Figure 1: Thermal derating curve of LV5-1510-20-UL-SLR inverter, rated power ≤50°C

<sup>4</sup> reduced output power (95%) @ 50°C



## 2. LV5-1510-20-UL-SLR RATED POWER VS. TEMPERATURE

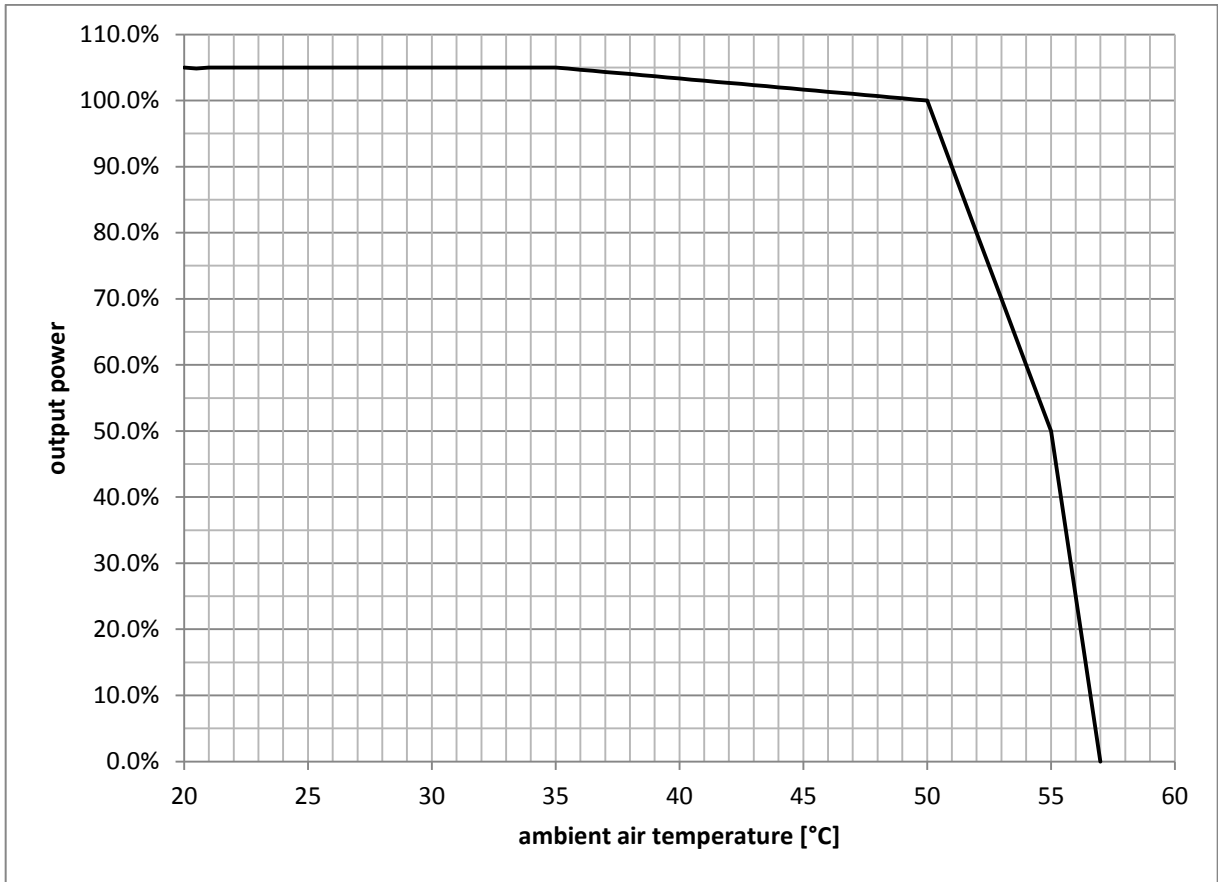


Figure 1: Thermal derating curve of LV5-1510-20-UL-SLR



### 3. MODIFICATION RECORD

Revision	Date	Author	Details
000	08.11.2016	H. Marxen	Initial issue LV5-UL2
001	06.12.2016	P. Nadolny	Revision of technical data