DATA SHEET

FLEXINVERTER Solar Inverter

The **FLEX**INVERTER Solar Inverter combines GE's **FLEX**INVERTER 1500V with various options for a reliable, plug & play, factory integrated power conversion solution for utility-scale solar installations.

The **FLEX**INVERTER Solar Inverter is one of the is one of the industry's leading 1500V developments and is GE's latest evolution in renewable power electronics. Building on expertise in the renewables industry, GE now offers its latest power conversion technology for efficient, cost effective and dispatchable solar power.

FLEXINVERTER Solar Inverter Features:

- 3.0-3.9 MVA, high density design
- Multiple DC & AC voltage ratings for optimum value
- Advanced grid features and reactive power control day and night for grid stabilization
- IEC and UL compliance
- Standard tricon container for optimized logistics
- Digital ready
- DC-coupling option

SPECIFICATIONS	UNITS	1560	1563	1566	1569
INPUT DATA					
MPPT Range [1]	Vdc	851 - 1300	893 - 1300	936 - 1300	978 - 1300
Max Permissible DC Voltage	Vdc	1500			
Max DC Current (at 40°C / 50°C) [2]	Adc	4200 / 3700			
Max DC Short Circuit Interrupt Rating	Adc	12000 [3]			
Number of DC Inputs & cables		Up to 24 inputs; Cables: 2 x 350 kcmil (185 mm^2) or 1 x 700 kcmil (350 mm^2) per DC input			
DC-coupling with battery storage systems		Option – compatible with or without PV optimizers including separate BESS input			
OUTPUT DATA – Low Voltage					
AC Output Power (up to 40°C / at 50°C) [4]	MVA	3.39 / 3.00	3.56 / 3.15	3.73 / 3.30	3.90 / 3.45
AC Output Voltage (+10% / -10%) [5]	Vac	600	630	660	690
Max AC Current (up to 40°C / at 50°C)	Aac	3263 / 2886			
Rated Output Power (at 52°C & 0.92 PF)	MVA	2.76	2.90	3.04	3.17
AC Connection		Direct busbar connection or busbar to cable option			
Grid Frequency ±5%	Hz	50 / 60			
Power Factor (PF) Range		0 - 1 leading & lagging [5]			
Current Harmonic Distortion (TDD)	%	<3			
EFFICIENCY & AUXILIARY POWER					
Inverter Efficiency Discharging (Max / EU / CEC) [6]	%	98.9 / 98.6 / 98.7			
Nighttime Aux Power [7]	W	≤200			
INTERFACES					
Plant Control Interface / PLC		Modbus TCP, EGD			
Diagnostic Interface		Modbus TCP			
Extra Analog and Digital I/O		Option			
FEATURES					
Cooling		Air Cooled			
Local 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			
Insulation Monitoring		Option			
Customer Aux Power Loads [8]		Option (up to 45 kVA)			
Overvoltage Protection, DC and AC		Included – IEC 61643-1 Class II / UL 1449			
Weather Station		Option			
Noise (at 1m / 10m) [9]	dBA	≤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 x 9.5			
Colorcode		RAL 9003 (Signal White)			

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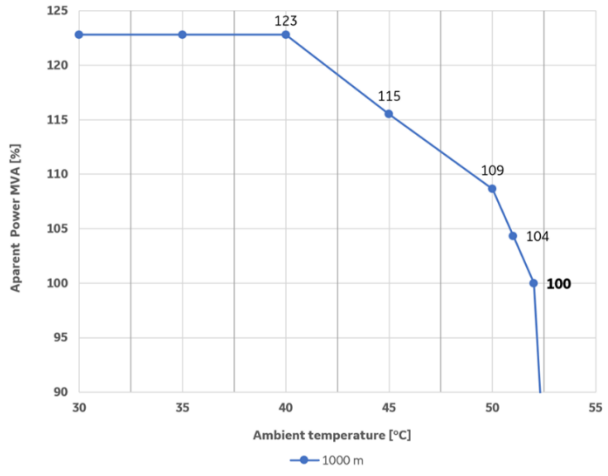
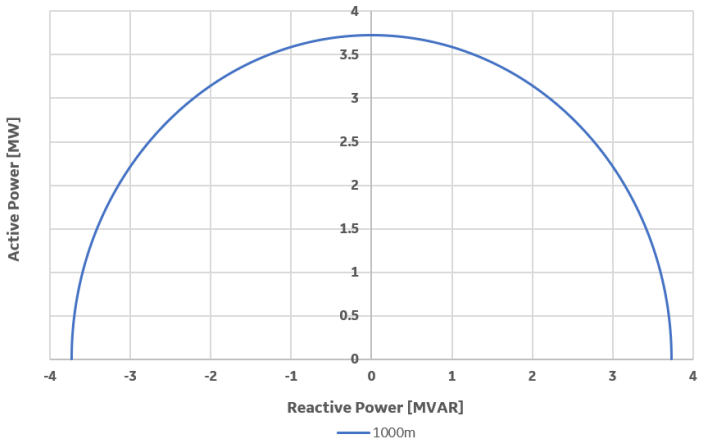
PROTECTION RATING AND AMBIENT CONDITIONS					
Power Disconnect AC Side		Motorized AC Circuit Breaker			
Switch-Disconnect DC Side		Motorized DC Switch			
Operating Temperature Range	°C / °F	Standard -10 to +55 / +14 to +131, Option -25 to +55 / -13 to +131			
Storage Temperature Range	°C / °F	-40 to +65 / -40 to +149			
Cold Weather Option [10]	°C / °F	Down to -35 / -31			
Humidity	%	5 to 100 (rated for outdoor installation)			
Maximum Altitude Without Derating [11]	m / ft	1000 / 3281			
Seismic		Zone 2B ASCE 7 / IBC			
Maximum Wind Speed [12]	kph / mph	250 / 155			
Snow Load		ASCE 7			
NEMA Rating / IP Class		NEMA 3 / IP54			
STANDARDS					
Electromagnetic Compatibility (EMC)		EN 61000-6-2, 62920 / CISPR 11			
Certifications		IEC, CE, CSA, UL 1741 SA			

1. *At nominal grid voltage and PF=1, derating above 1300 Vdc according to PQ curves*
2. *Up to 40 °C, includes and is applicable for the application at 35 °C ambient*
3. *Up to 5 times per lifetime*
4. *AC Power is valid for grid voltage ≥ nominal voltage. Self-consumption (max ~15 kVA) and customer auxiliary loads not included*
5. *Derating will apply according to PQ curves*
6. *Preliminary, excludes auxiliary power losses*
7. *No heating, no cooling, without environmental controls enabled & DC link de-energized*
8. *Customer Aux Power demand reduces total AC output power*
9. *At 10m in front of enclosure and 1m up from the ground*
10. *Cold weather option on request*
11. *Higher altitudes (with derating) on request*
12. *Maximum wind speed without derating 81 kph / 50 mph*

Power/ Temperature Derating Curve[13] & Sample PQ Diagram[14]





13. *Applicable for grid voltage ≥ nominal voltage, altitudes >1000m on request*

14. *PQ diagram for LV5+ 1566 at nominal grid voltage, 1300 Vdc and 40 °C ambient*

www.ge.com/renewableenergy/hybrid

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English
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