

FLEXINVERTER 1.5kV BESS Energy Storage Standalone Inverter

The GE Vernova **FLEX**INVERTER Battery Energy Storage Inverter builds on proven power electronics technology, global manufacturing experience and an extensive global installed base with over 28 GW of **FLEX**INVERTER produced and/or in operation around the world.

The **FLEX**INVERTER Battery Energy Storage Inverter is designed to integrate seamlessly into most energy storage systems for reliable, profitable and dispatchable power.

FLEXINVERTER features:

- Up to 4.4 MVA output power
- High efficiency
- Air-cooled system
- Advanced grid features
- IEC and UL compliance
- Standard tricon container for optimized logistics
- Digital ready



SPECIFICATIONS	UNITS	1571
INPUT DATA	UNITS	15/1
DC Input Range at Full Power Operation ¹	Vdc	1071 - 1450
Max DC Operating Voltage ¹	Vdc	1500
Max DC Current (up to 25°C / at 50°C)	Adc	4000 / 3600
Max DC Short Circuit Withstand	kAdc	Up to 290kA peak
Number of DC Inputs & cables		Standard 12, up to 24 inputs; up to 800 kcmil (400 mm ²) per DC input
Max DC Fuse Rating per DC Input	Adc	Up to 750, multiple fuse ratings available
OUTPUT DATA - LOW VOLTAGE		
Rated Output Power (at 52°C & 0.92 PF) ²	MVA	3.85
AC Output Voltage (+10% / -10%) ²	Vac	715
AC Discharge Power (up to 35°C / at 50°C) ³	MW MVA	4.21/3.77 4.45/4.16
Max Discharge AC Current (up to 40°C / at 50°C)	Aac	3593 / 3363
AC Charge Power (up to 25°C / at 50°C) ³	MW MVA	3.93 / 3.24 4.29 / 3.57
Max Charge AC Current (up to 25°C / at 50°C)	Aac	3424 / 2883
AC Connection		Direct busbar connection or cable marshaling box as an option
Grid Frequency ±5%	Hz	50 / 60
Power Factor (PF) Range ²		0 - 1 leading & lagging
Current Harmonic Distortion (TDD)	%	<3
EFFICIENCY AND AUXILIARY POWER		
Inverter Efficiency (Average for one way) 4	%	98.0
Idle-time Aux Power ⁵	W	≤200
INTERFACES		
Plant Control Interface / PLC		Modbus TCP, EGD
Diagnostic Interface		Modbus TCP
Extra Analog and Digital I/O		Option
FEATURES AND OPTIONS		
Cooling		Air Cooled
Local Shut Down Button		Included
Mounting Options		Piers / Pad / Piles
DC Configuration Supported		Floating
Idle-time VAR Capability		Option
Insulation Monitoring		Option
Container Color Code		RAL 6036 (Dark Teal)
Disconnect Low Voltage AC Side		Motorized AC Circuit Breaker
Disconnect DC Side		Motorized No-Load DC Switch

SPECIFICATIONS	UNITS	1571
FEATURES AND OPTIONS		
Overvoltage Protection – DC and AC		Included – IEC 61643-1 Class II / UL 1449
Customer Aux Power Loads 6	kVA	Standard 6, Option up to 165 with 1 circuit
Revenue Grade Metering		Option
GPS Enabled Fault Timestamping		Option (compliant to MISO App G and CAISO App H)
Altitude ²	m / ft	No derating ≤ 1000 / 3281, up to 4000 / 13124
Noise at 1m 7		≤79
Weight		Approximately 5100 / 11244
Dimensions (L x W x H)		2.0 x 2.4 x 2.9 / 6.5 x 8 x 9.5
PROTECTION RATING AND AMBIENT CON	DITIONS	
Operating Temperature Range	°C / °F	Standard -10 to +55 / +14 to +131, Option -25 to +55 / -13 to +131
Cold Weather Option ⁸	°C / °F	Down to -35 / -31
Storage Temperature Range	°C / °F	-40 to +65 / -40 to +149
Humidity	%	5 to 100 (rated for outdoor installation)
Maximum Altitude Without Derating ⁹	m / ft	1000 / 3281
Seismic		IBC 2018 / ASCE 7-10 Ss=2g for 0.2 Sec
Maximum Wind Speed 10	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
Compatibility		IEEE 2800

1. At nominal grid voltage, derating according to PQ curves

2. Derating will apply according to PQ curves

 AC Power is valid for grid voltage ≥ nominal voltage. Selfconsumption (max ~15 kVA) and customer auxiliary loads not included 4. Preliminary efficiencies round trip performance, includes selfconsumption auxiliary power losses

5. No heating, no cooling, without environmental controls enabled & DC link de-energized

6. Customer Aux Power demand reduces total AC output power

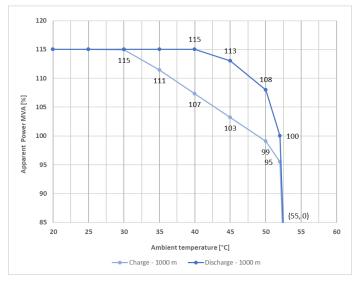
7. At 1m in front of enclosure and 1.5m up from the ground. Please respect the restricted areas described in the manual

8. Cold weather option on request

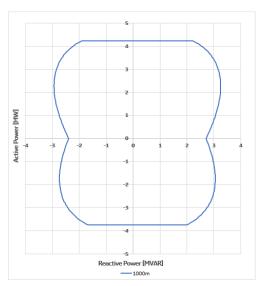
9. Higher altitudes (with derating) on request

10. Maximum wind speed without derating 81 kph / 50 mph

Power/ Temperature Derating Curve ¹¹ & Sample PQ Diagram ¹²



11. Applicable for grid voltage ≥ nominal voltage, altitudes >1000m on request, derating according to PQ Curves



12. Sample PQ diagram for **FLEX**INVERTER

https://www.gevernova.com/solar-storage

©2024 GE Vernova and/or its affiliates. All rights reserved. GE and the GE Monogram are trademarks of General Electric Company used under trademark license GE Vernova reserves the right to make technical changes or modify the contents of this document without prior notice. Agreed particulars within purchase order will prevail



FI BES PS 1.5kVdc 715Vac Datasheet X88037-R001 English 240903