

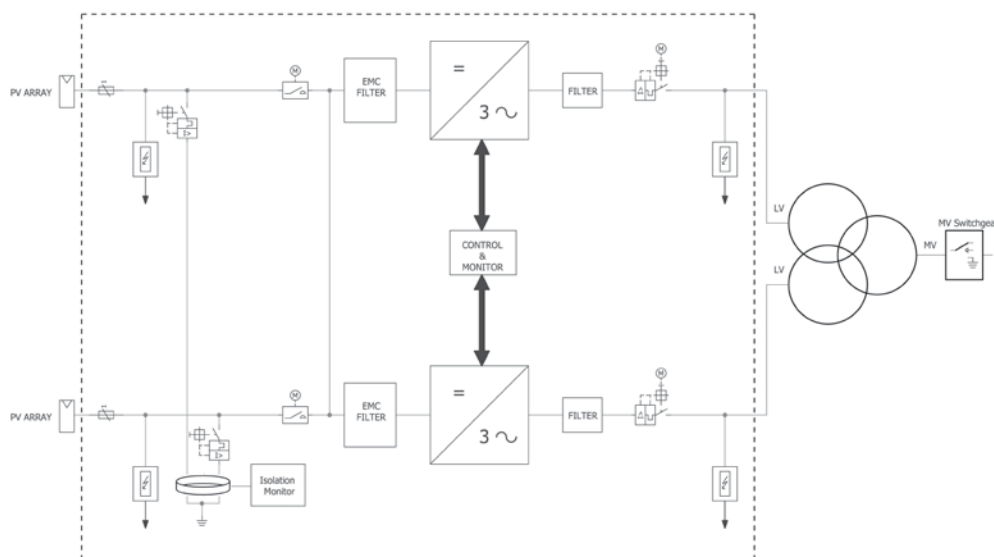
Gamesa E-2.25 MVA-SB-0-UL

Gamesa Electric photovoltaic inverter



NEW 1500 Vdc

- ▶ DC Input Voltage Range up to 1500 Vdc.
- ▶ Outdoor inverter with polyurethane reinforced isolated protection.
- ▶ Maximum reliability and robustness by leveraging Gamesa's experience on the much more demanding wind sector.
- ▶ UL/CSA certification.
- ▶ Optimized cooling system for power bridges drops load losses and drastically reduces consumptions.
- ▶ Forced air cooling driven by variable speed fans minimizes electrical consumption.
- ▶ Frontal and rear access eases any operation and maintenance task.
- ▶ Compact inverter. It allows the integration of 4,5 MVA skid plug&play solutions, including two inverters + outdoor transformer + switchgear.
- ▶ A unique control card and same CCU installed in Gamesa wind generators. With over 5.000 units already installed for wind applications and a high MTBF (Mean Time Between Failures), Gamesa Electric's CCU is a control system highly robust and reliable. At the same time, it complies with the strictest grid codes all around five continents.
- ▶ Tropicalized control cards allow the inverter to work in very high humidity and dust environments.
- ▶ Built-in web server for remote monitoring and control.



TECHNICAL SPECIFICATIONS

DC INPUT VALUES

Recommended rated power	2,500-2,700 kWp
Max. DC Current @ 50°C	2,500 A
Direct Current voltage range	935 - 1,500 V
DC MPPT voltage range	935 - 1,250 V
No. of DC ports	Up to 24
Start of production	0,5% Pn approx.

AC OUTPUT VALUES

Nº of phases	3
Nominal AC power (50°C)	2,250 kVA
Maximum AC power (40°C)	2,300 kVA
Maximum AC power (25°C)	2,500 kVA
Nominal AC voltage	660 Vrms
Voltage allowance range	-10% / +10%
Frequency range	47.5...53/57...63 Hz
Power factor	Any
THD of AC current	<3% @ Pn
Nominal AC current per phase	1,970 A
Max. AC current per phase	2,190 A

PERFORMANCE

Max. performance	98.5%
European performance	98.2%
Stand-by power consumption	< 200 W

OTHER FEATURES

MPPT	1
LVRT/HVRT	Yes
Permissible ambient temperature	-20°C/+50°C (+60°C) ⁽¹⁾
Relative humidity	95% (without condensation)
Max. Altitude	2,000 m
Size (width x height x depth)	3,250 x 2,200 x 1,000
Weight	2,000 kg
Protection degree	IP 54 / NEMA 3R
Cooling	Forced air

Main standards

UL 1741: 2010	C22.2 No.1071-01:2001
UL 62109-1	NEC 2014
IEEE1547	
IEC 61000-6-2	IEC 61000-6-4
IEC 62109-1	IEC 62109-2
IEC 62116	IEC 61683

For more information, please contact Gamesa Electric.
⁽¹⁾With derating from +50 to +60°C.

Interfaces

Communication protocol.
MODBUS-TCP/IP
TCP-IP Connection.
Ethernet (CAN/PROFIBUS).

Protections

Reverse Polarity
DC and AC transient overvoltage.
DC and AC shortcircuit
Over-temperature

SPECIFIC DESIGNED FOR GRID INTEGRATION

- ▶ Reactive power injection capability across all inductive and capacitive range. The inverter can work in a 100% statcom mode.
- ▶ Night reactive injection capability without need of additional kits. Beside our Power Plant Controller (PPC), it also enables to compensate, at its injection point (PCC), the inherent reactive power that any PV plant consumes at night.
- ▶ Beside our Power Plant Controller, reactive power management at the PCC: control of ramp up/down power injection, control of fix output active power, active power limitation, voltage and power factor control, reactive power control in function of external commands.
- ▶ Optimal solution for integration in both weak and highly perturbed grids.
- ▶ Possibility of non-characteristic harmonics cancellation over distorts and unbalance grids thanks to its specific functionality "Selective cancelation of harmonics" embedded in its firmware. Oscilloscope function integrated.

GLOBAL RELIABILITY

- ▶ Gamesa Electric harnesses the technological and productive capacities of a leading international group. With an O&M network in more than 30 countries spread over five continents, Gamesa offers solutions adapted to the needs of its customers in the various sectors, ensuring maximum reliability under the most demanding conditions.
- ▶ Cutting-edge power electronics technology applied to photovoltaic products for high performance, robustness and global reliability, leveraging on our wind converter's technology.

Optional solutions and kits

Dehumidifying Kit for humidity environments.
DC ground connection kit.
Very low temperature (< -20°C) environment kit.
Touch display in several languages.

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