

# Gamesa Electric PV 3X series PV Inverters

Maximum energy and versatility  
for utility-scale projects

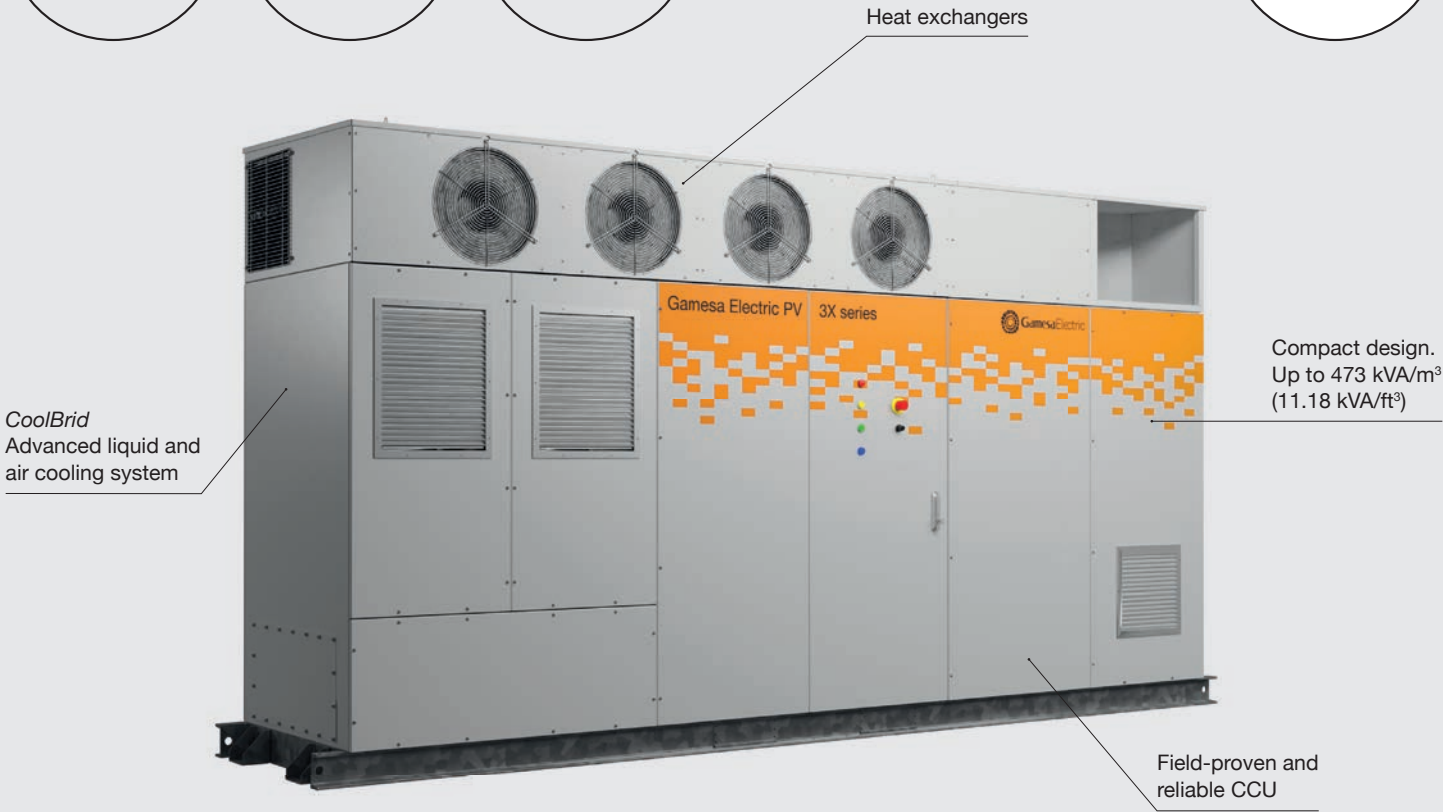


TDHi <1%




MPPT efficiency 99.9%

Outdoor solution

Up to 200% DC/AC ratio



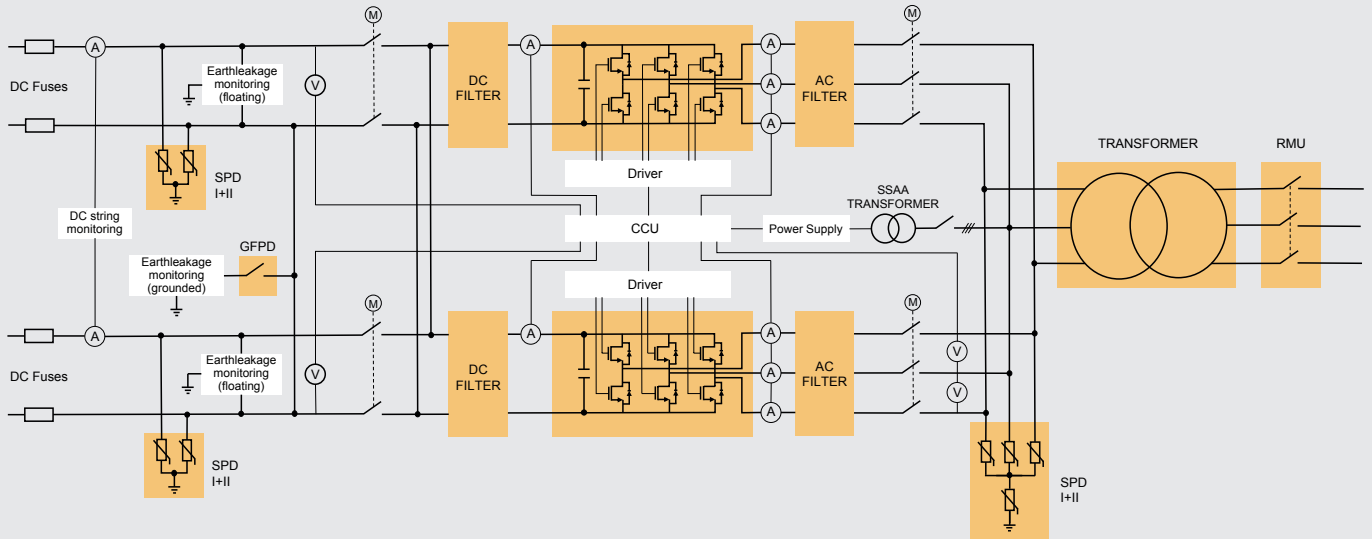
## Gamesa Electric PV 3X series High-power PV Inverter family

|  |   |  |  |
|--|---|--|--|
|  <p><b>Better LCoE</b></p>   | <p>Largest single inverter power block in the market with 4,700 KVA</p> | <p>Fewer inverters per project thus lower Capex and Opex</p>   | <p>DC/AC ratio of up to 200%</p>   |
|  <p><b>Higher yield</b></p>  | <p>Market-leading efficiency with 99.4%</p>                             | <p>THDi &lt; 1% which reduces losses</p>   | <p>Enhanced temperature derating: keeping full power up to 104°F</p>         |
|  <p><b>Built to last</b></p> | <p>Designed and manufactured for a 30 year life span</p>                | <p>CoolBrid: Smart hybrid cooling system that allows critical components to work far below the temperature limit</p> | <p>Lowest THDi in the market helps to extend power transformers lifespan</p> |

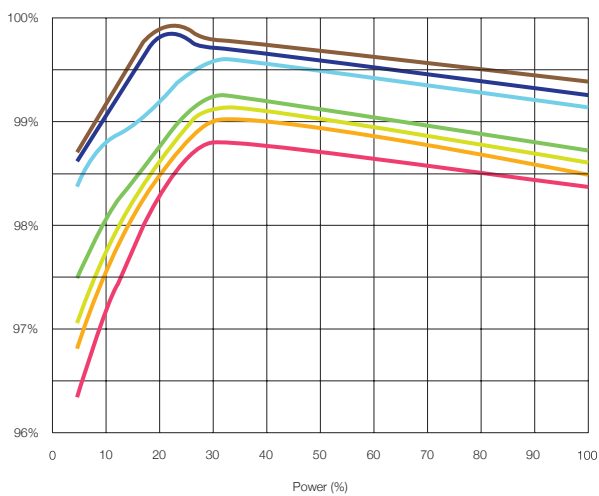


The Gamesa Electric PV 3X series inverters combine high power with maximum versatility for PV plants LCoE reduction.

Different product configurations available to optimize performance in demanding environments as well as different voltage levels to fit customers' needs.



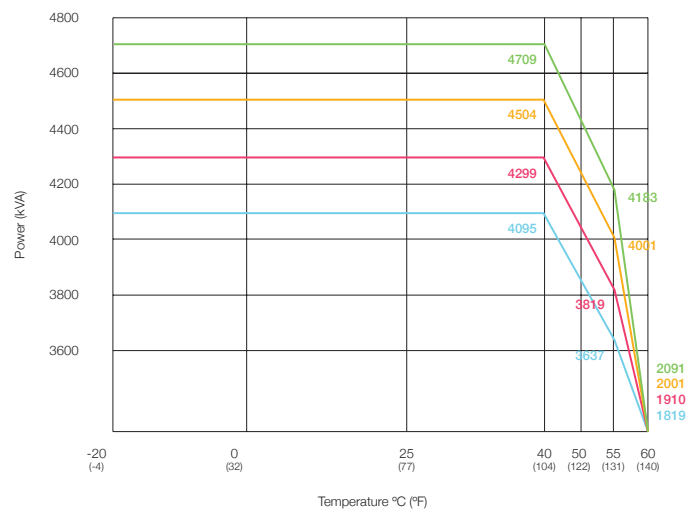
### Efficiency



- 1300 Vdc
- 1110 Vdc
- 935 Vdc
- 1220 Vdc
- 950 Vdc
- 915 Vdc
- 1175 Vdc

### Configurations

Up to 4700 kVA at 1300 V



Temperature °C (°F)

- PV 4700
- PV 4500
- PV 4300
- PV 4100

|   | PV 4100   | PV 4300      | PV 4500      | PV 4700      |
|---|---|--------------|--------------|--------------|
| <b>DC Input</b>                                   |   |              |              |              |
| Ratio DC / AC                                     | Up to 200%  |              |              |              |
| Max. DC Current @77°F [25°C]                      | 2 x 2500 A  |              |              |              |
| Max. DC Current @104°F [40°C]                     | 2 x 2500 A  |              |              |              |
| Max. DC Current @131°F [55°C]                     | 2 x 2220 A  |              |              |              |
| Max. DC Current @140°F [60°C]                     | 2 x 1110 A  |              |              |              |
| Maximum Short-circuit Current, I <sub>sc</sub> PV | Up to 9000 A  |              |              |              |
| DC Voltage Range                                  | 835 - 1500 V  | 875 - 1500 V | 915 - 1500 V | 955 - 1500 V |
| DC Voltage Range MPPT                             | 835 - 1300 V  | 875 - 1300 V | 915 - 1300 V | 955 - 1300 V |
| Nr of DC Ports                                    | max 24 fuse +/- monitored<br>max 36 fuse + monitored        |              |              |              |
| Fuse Dimensions                                   | 125 A to 500 A  |              |              |              |
| Max. Wire Cross Section per DC Input              | 2 x 400 mm <sup>2</sup> - 800 AWG                           |              |              |              |
| MPPT  | 1   |              |              |              |
| Energy Production from                            | 0.5% Pn approx.   |              |              |              |
| <b>AC Output</b>                                  |   |              |              |              |
| Nominal AC Power @77°F [25°C]                     | 4095 kVA  | 4299 kVA     | 4504 kVA     | 4709 kVA     |
| Nominal AC Power @104°F [40°C]                    | 4095 kVA  | 4299 kVA     | 4504 kVA     | 4709 kVA     |
| Nominal AC Power @131°F [55°C]                    | 3637 kVA  | 3819 kVA     | 4001 kVA     | 4183 kVA     |
| Nominal AC Power @140°F [60°C]                    | 1819 kVA  | 1910 kVA     | 2001 kVA     | 2091 kVA     |
| Maximum Output AC Current                         | 3940 A  |              |              |              |
| Nominal AC Voltage                                | 600 Vrms  | 630 Vrms     | 660 Vrms     | 690 Vrms     |
| Max. Wire Cross Section per AC Output Phase       | 6 x 400 mm <sup>2</sup>                                     |              |              |              |
| AC Power Frequency                                | 50 / 60 Hz  |              |              |              |
| THD of AC Current                                 | < 1%  |              |              |              |
| Reactive Power Range                              | Any   |              |              |              |
| <b>Efficiency</b>                                 |   |              |              |              |
| Max. Efficiency                                   | 99.34%  |              |              |              |
| Euro Efficiency                                   | 99.24%  |              |              |              |
| CEC Efficiency                                    | 99.02%  | 99.07%       | 99.11%       | 99.14%       |
| Stand-by Power Consumption                        | < 200 W   |              |              |              |
| <b>Protective Devices</b>                         |   |              |              |              |
| DC Input  | Fuse and motorized load disconnecter                        |              |              |              |
| AC Input  | Motorized air circuit breaker                               |              |              |              |
| Overvoltage Protections AC                        | Type 1 + 2 SPD  |              |              |              |
| Overvoltage Protections DC                        | Type 1 + 2 SPD  |              |              |              |
| <b>Communications</b>                             |   |              |              |              |
| Control   | Modbus TCP / IP (Profinet, CAN upon request) <sup>(1)</sup> |              |              |              |
| Monitoring  | Modbus TCP / IP   |              |              |              |
| <b>Other Features</b>                             |   |              |              |              |
| LVRT  | Yes   |              |              |              |
| HVRT  | Yes   |              |              |              |
| Working Ambient Temperature*                      | -20°C / +60°C (-4°F / +140°F). Option -40°C (-40°F)         |              |              |              |
| Relative Humidity                                 | 4% - 100% (without condensation)                            |              |              |              |
| Max. Altitude (Whithout Derating)**               | 2000 m (6561ft)   |              |              |              |
| Dimensions (Width x Height x Depth)               | 4325 x 2250 x 1022 mm / 170.3 x 88.5 x 40.2 in              |              |              |              |
| Weight  | 4045 Kg (8918 lb)   |              |              |              |
| Protection  | IP55 class 1 / NEMA3R                                       |              |              |              |
| Cooling   | Liquid & forced air   |              |              |              |
| <b>Main Standards</b>                             |   |              |              |              |
| IEC 62109-1                                       | IEC 62920   | IEEE519      | Rule 21      |              |
| IEC 62109-2                                       | EN 50530  | PO12.2       | Rule 14      |              |
| IEC 61000-6-2                                     | IEC 62116   | UL 1741-SA   | PRC 024      |              |
| IEC 61727   | IEC 61683   | CSA C22.2    | NEC 2017     |              |
| EN 55011  | IEC 60529   | UL62109-1    |              |              |



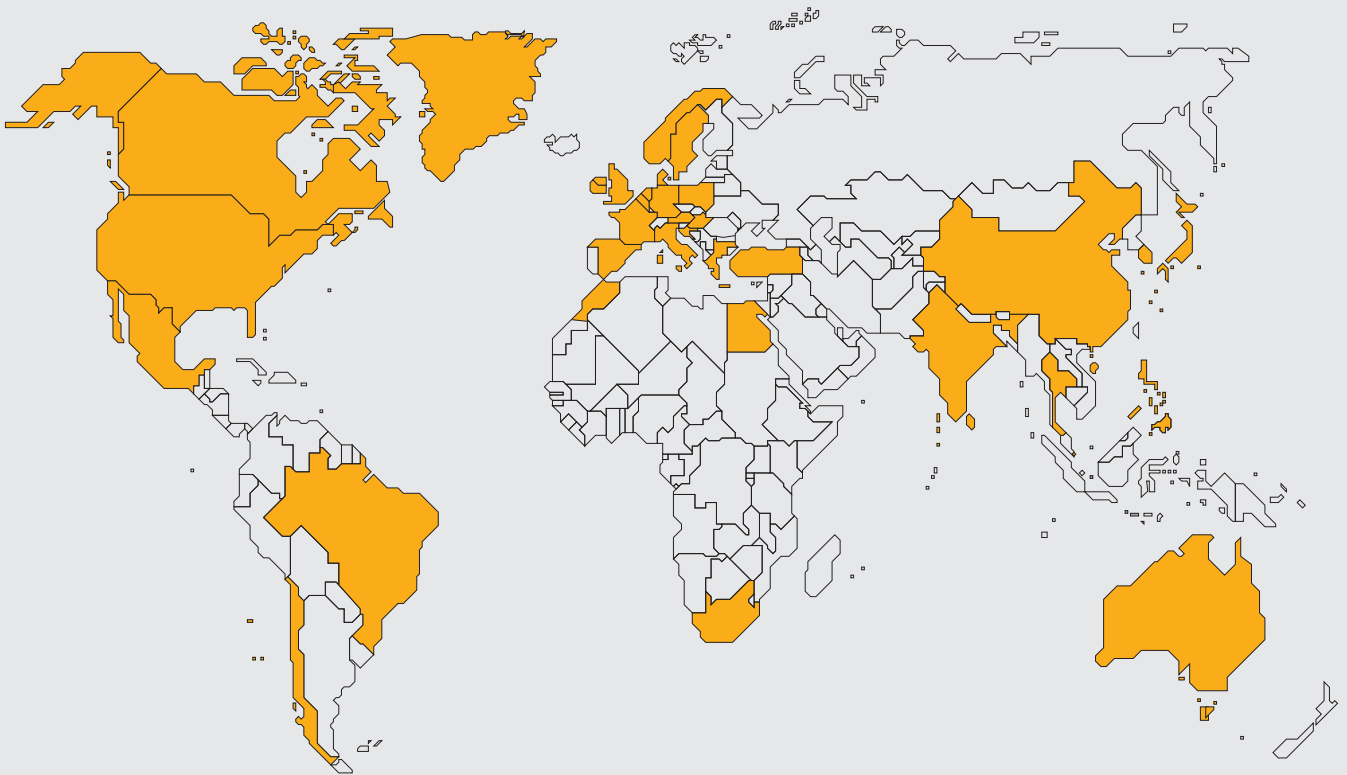
**+3.7 GW**  
SOLAR ENERGY



**+112 GW**  
WIND POWER



**+90**  
COUNTRIES



**Worldwide presence**

Australia  
Austria  
Belgium  
Brazil  
Canada

Chile  
China  
Croatia  
Denmark  
Egypt

France  
Germany  
Greece  
Hong Kong  
Hungary

India  
Ireland  
Italy  
Japan  
Korea

Mexico  
Morocco  
Netherlands  
Norway  
Philippines

Poland  
Singapore  
South Africa  
Sri Lanka  
Sweden

Thailand  
Turkey  
UK  
USA

