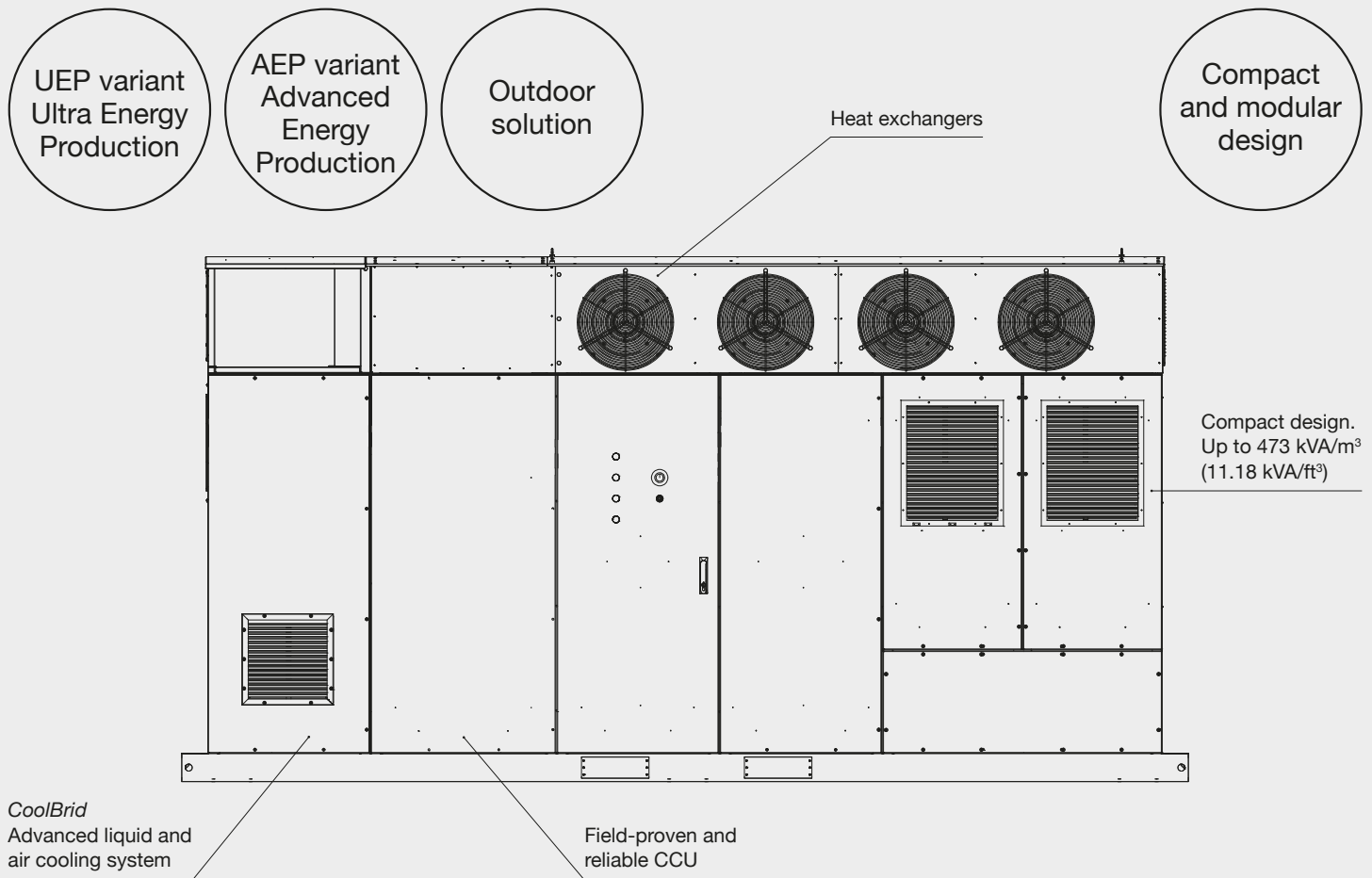






# Gamesa Electric PV 3X series PV Inverters AEP & UEP

Maximum energy and versatility  
for utility-scale projects





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

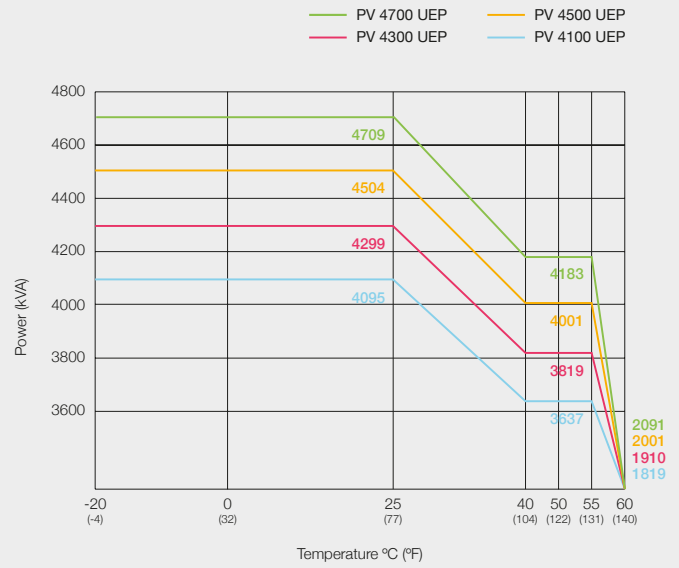
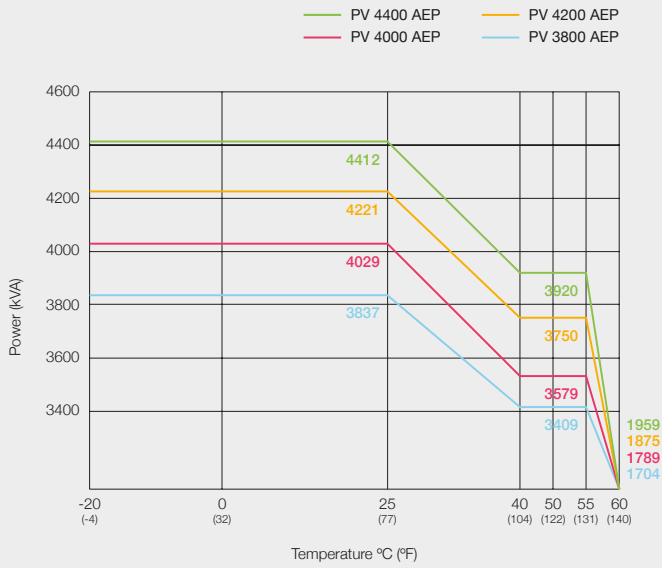
 <p><b>Better LCoE</b></p>	<p>Compact design which allows 2-inverter solution of up to 9400 kVA in a standard 40 ft skid, achieving overall cost reduction by using less PV station units per project</p>	<p>Design with best-in-class component that guarantees less probability of failure and therefore less operation cost (materials and workforce)</p>	<p>Market leading inverter efficiency of 99.4%</p>
 <p><b>Reliability</b></p>	<p>Smart liquid/air <i>CoolBrid</i> cooling system that allows critical components to work at temperature level far below the limit, guaranteeing product life span</p>	<p>Tier I suppliers for critical components (power semiconductors, capacitors, inductances and control cards) with best-in-class MTBF values</p>	<p>“Easy to support” concept, with heavy components in removable trays, reducing maintenance and repair time (MTTR)</p>
 <p><b>Grid compliance</b></p>	<p>An extensive list of grid-codes compliance, including the most demanding ones, such as Germany, Mexico, Jordan, South Africa and more</p>	<p>Full operating range reactive power supply for both day and night operation through the so-called Statcom mode</p>	<p>Non-characteristic harmonics cancellation over distorted and unbalanced grids (weak grids)</p>
 <p><b>Higher yield</b></p>	<p>High DC/AC ratio (up to 200%) to be prepared for bifacial modules, achieving higher production values</p>	<p>Enhanced MPPT algorithm that provides outstanding MPPT efficiency values at static and dynamic states</p>	<p>More yield even in challenging sites: operating up to 55°C (up to 3.6% more energy production) and 2000 m (6561 ft) without derating</p>

## AEP Configurations

Up to 4400 kVA at 1500 V

## UEP Configurations

Up to 4700 kVA at 1500 V



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



	PV 3800 AEP	PV 4000 AEP	PV 4200 AEP	PV 4400 AEP
<b>DC Input</b>				
Ratio DC / AC	Up to 200%			
Max. DC Current @25°C [77°F]	2 x 2362 A			
Max. DC Current @40°C [104°F]	2 x 2100 A			
Max. DC Current @55°C [131°F]	2 x 2100 A			
Max. DC Current @60°C [140°F]	2 x 1050 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 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 @25°C [77°F]	3837 kVA	4029 kVA	4221 kVA	4412 kVA
Nominal AC Power @40°C [104°F]	3409 kVA	3579 kVA	3750 kVA	3920 kVA
Nominal AC Power @55°C [131°F]	3409 kVA	3579 kVA	3750 kVA	3920 kVA
Nominal AC Power @60°C [140°F]	1704 kVA	1789 kVA	1875 kVA	1959 kVA
Maximum Output AC Current	3692 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	99.40%			
Euro Efficiency	99.29%			
CEC Efficiency	99.01%	99.02%	99.14%	99.04%
Stand-by Power Consumption	< 200 W			

<b>Protective Devices</b>				
DC Input	Fuse and motorized load disconnecter			
AC Input	Motorized air circuit breaker			
Oversvoltage Protections AC	Type 1 + 2 SPD			
Oversvoltage 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	3945 Kg (8697 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		

<sup>(1)</sup> For this feature availability, please consult Gamesa Electric

\* With derating from 25°C / 77°F

\*\* Up to 4000 m (13123 ft) with derating, as optional

	PV 4100 UEP	PV 4300 UEP	PV 4500 UEP	PV 4700 UEP
<b>DC Input</b>				
Ratio DC / AC	Up to 200%			
Max. DC Current @25°C [77°F]	2 x 2500 A			
Max. DC Current @40°C [104°F]	2 x 2220 A			
Max. DC Current @55°C [131°F]	2 x 2220 A			
Max. DC Current @60°C [140°F]	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 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 @25°C [77°F]	4095 kVA	4299 kVA	4504 kVA	4709 kVA
Nominal AC Power @40°C [104°F]	3637 kVA	3819 kVA	4001 kVA	4183 kVA
Nominal AC Power @55°C [131°F]	3637 kVA	3819 kVA	4001 kVA	4183 kVA
Nominal AC Power @60°C [140°F]	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			
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EN 55011	IEC 60529	UL62109-1		



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



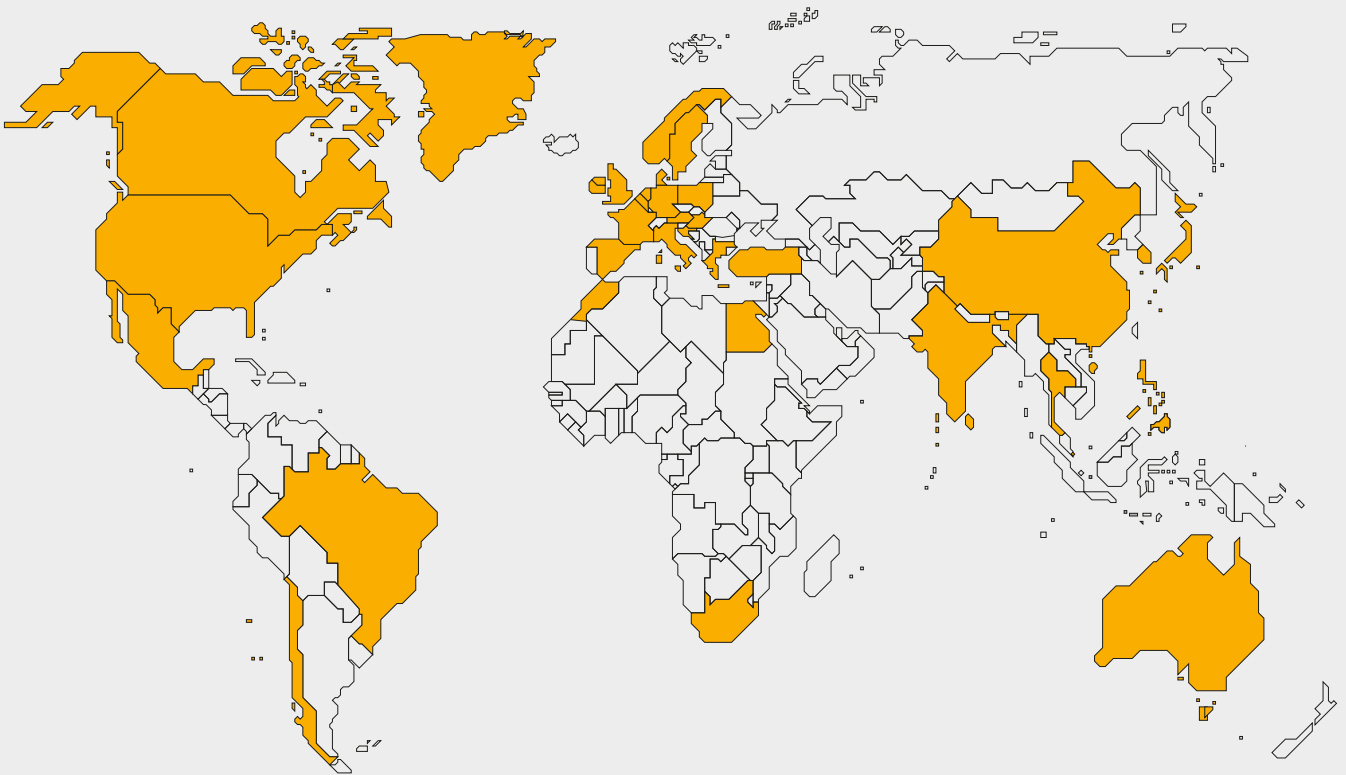
**+3.1 GW**  
SOLAR ENERGY



**+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

