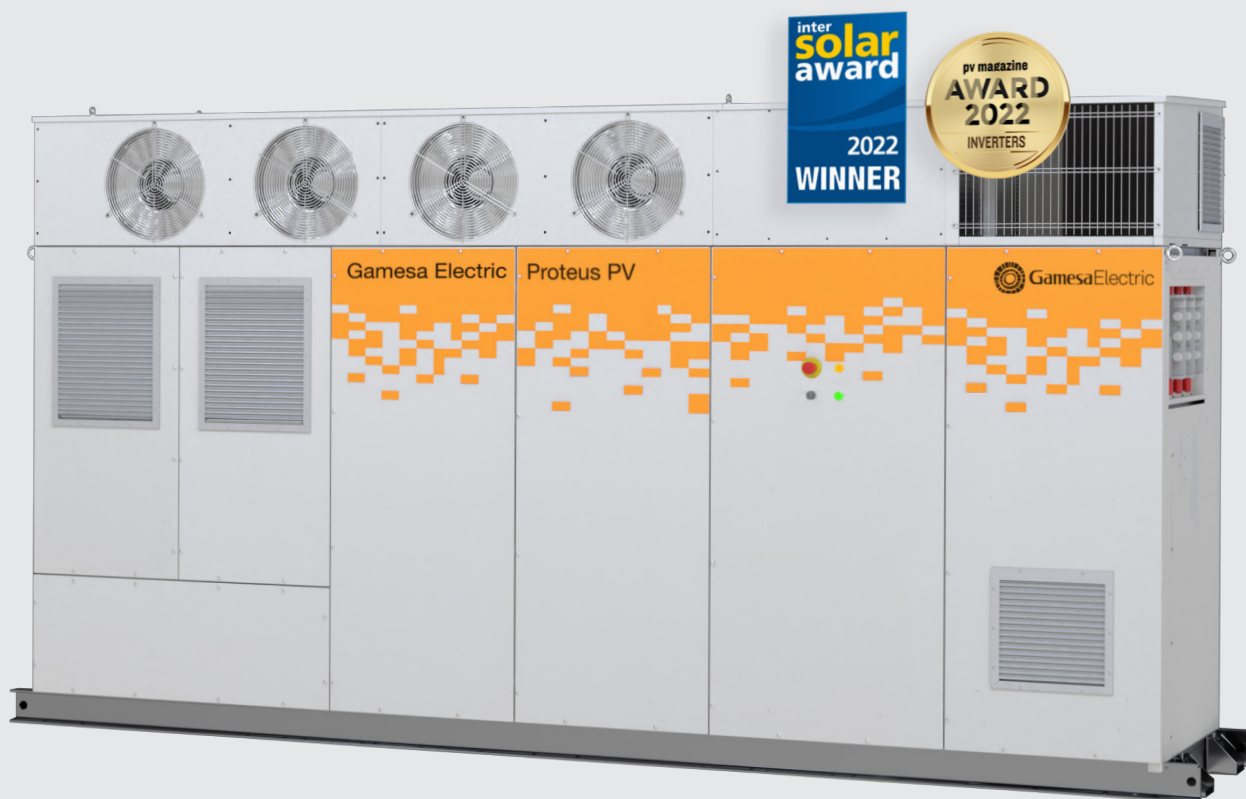




Gamesa Electric Proteus PV Inverters

Maximum energy and versatility
for utility-scale projects



Up to 200%
DC/AC ratio

THDi < 1%

MPPT
efficiency
99.9%

Outdoor
solution

CoolBrid
Advanced liquid and
air cooling system

Heat exchangers

Compact design.
473 kVA/m³
(11.18 kVA/ft³)

Field-proven
and reliable CCU

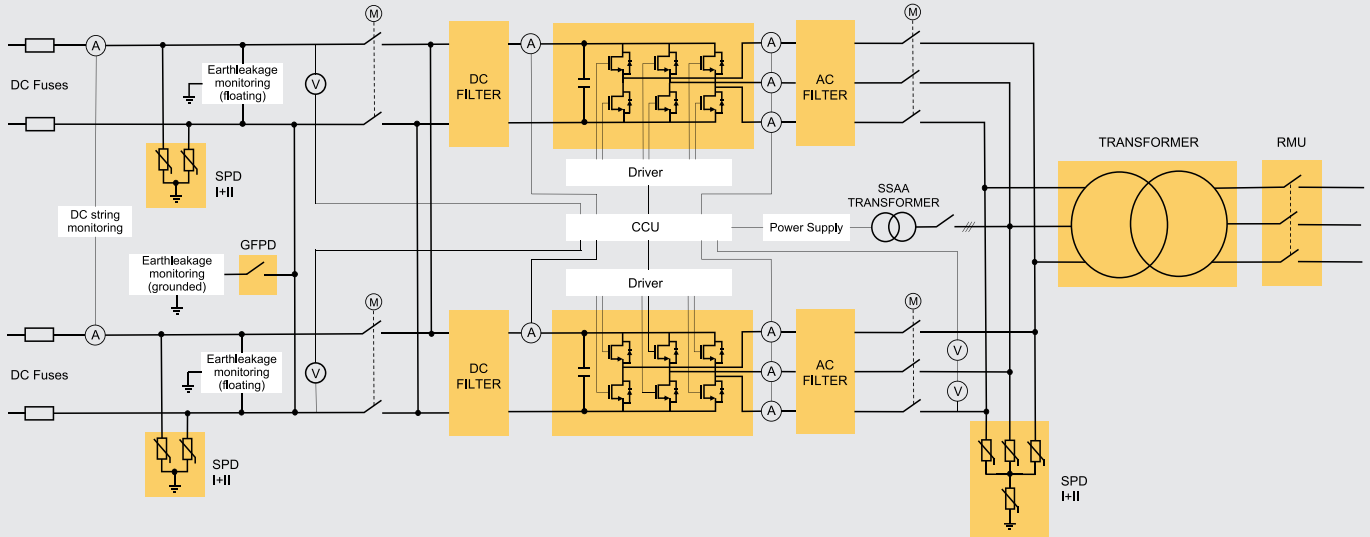
Gamesa Electric Proteus PV Inverters

 Better LCoE	Largest single inverter power block in the market with 4,700 kVA	Fewer inverters per project thus lower Capex and Opex	DC/AC ratio of up to 200%
 Higher yield	Market-leading efficiency with 99.45%	THDi < 1% which reduces losses	Enhanced temperature derating: keeping full power up to 40°C [104°F]
 Built to last	Designed and manufactured for a 30 year life span	CoolBrid: Smart hybrid cooling system that allows critical components to work far below the temperature limit	Lowest THDi in the market helps to extend power transformers lifespan

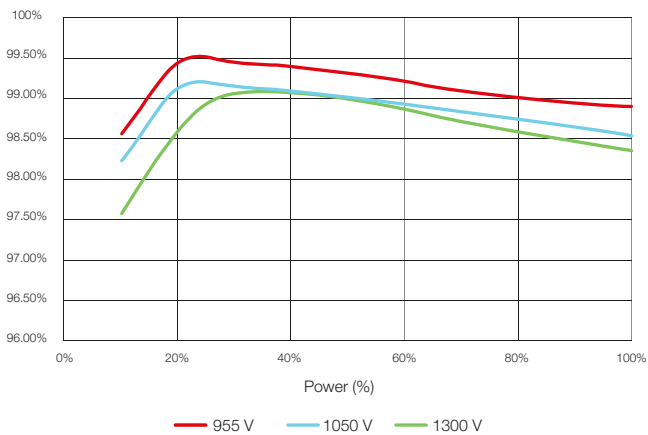


The Gamesa Electric Proteus PV Inverters combine high power with maximum versatility for PV plants LCoE reduction.

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

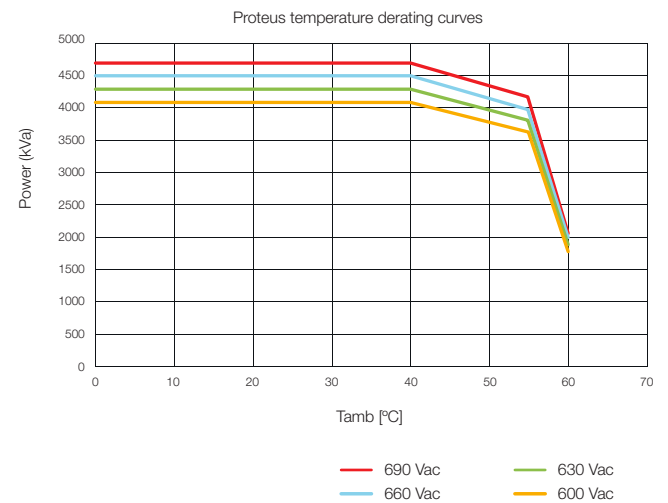


Efficiency



Configurations

Up to 4700 kVA



	Gamesa Electric Proteus PV 4100	Gamesa Electric Proteus PV 4300	Gamesa Electric Proteus PV 4500	Gamesa Electric Proteus PV 4700
DC Input				
DC Voltage Range ⁽¹⁾	835 - 1500 V	875 - 1500 V	915 - 1500 V	955 - 1500 V
DC Voltage Range MPPT ⁽¹⁾	835 - 1300 V	875 - 1300 V	915 - 1300 V	955 - 1300 V
Number of Power Modules	2, not galvanically isolated, 1 MPPT			
Max. DC Current @40°C [104°F]	2 x 2500 A			
Max. DC Current @50°C [122°F]	2 x 2313 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 _{sc} PV	Up to 9000 A			
Nr of DC Ports ⁽¹⁾	Max 24 fuse +/- monitored			
Fuse Dimensions	125 A to 630 A			
Max. Wire Cross Section per DC Input	2 x 400 mm² - 800 AWG			
Energy Production from	0.35% Pn approx.			

AC Output				
Number of phases	Three-phase			
Nominal AC Power Total @40°C [104°F]	4095 kVA	4299 kVA	4504 kVA	4709 kVA
Nominal AC Power Total @50°C [122°F]	3790 kVA	3979 kVA	4169 kVA	4358 kVA
Nominal AC Power Total @55°C [131°F]	3637 kVA	3819 kVA	4001 kVA	4183 kVA
Nominal AC Power Total @60°C [140°F]	1819 kVA	1910 kVA	2001 kVA	2091 kVA
Maximum AC Current @40°C [104°F]	3940 Arms			
Nominal AC Voltage ⁽¹⁾	600 Vrms	630 Vrms	660 Vrms	690 Vrms
Nominal Voltage Allowance Range ⁽¹⁾	+/- 15%			
Frequency Range ⁽¹⁾	50/60 Hz (+ 6% / - 7%)			
THD of AC Current	< 1% @Sn			
Power Factor Range ⁽³⁾	0 (lagging) - 1 - 0 (leading)			
Max. Wire Cross Section per AC Output	6 x 400 mm² - 800 AWG			

Performance				
Max. Efficiency	99.45%			
Euro Efficiency	99.24%			
CEC Efficiency	99.02%	99.07%	99.11%	99.14%
Stand-by Power Consumption	< 200 W			

General Data				
Temperature Range - Operation ⁽²⁾	-20°C / +60°C [-4°F / +140°F]			
Maximum Altitude ⁽³⁾	< 2,000 m [6,561 ft] (w/o derating)			
Cooling System	Liquid & forced air			
Relative Humidity	4% – 100% (w/o condensation)			
Protection Class	IP55 class 1, NEMA3R			
Dimensions (W/H/D)	4,325 x 2,250 x 1,022 mm [170.3" x 88.5" x 40.2"]			
Weight	4,535 kg [10,000 lb]			

AC Protections		Other Protections	
AC Side Disconnection & Short-circuit Current Protection	Two motorized AC circuit breakers - one per each power module	Over-temperature Protection	
AC Overvoltage Protection	Type 1 + 2 SPD	Emergency Push Button	
Anti-islanding	Included (SW)		
Grid Voltage Fluctuations (LVRT, HVRT) ⁽¹⁾	Included (SW)		
Frequency Failure	Included (SW)		

DC Protections		Optional	
DC Disconnection	Two motorized DC switches (on-load) - one per each power module	Low Temperature Kit up to -30°C [-22°F]	
DC Short-circuit Protection	DC fuses	Enhanced corrosion protection	
DC Over-voltage Protection	Type 1 + 2 SPD		
Reverse Polarity Detection	Included		
DC Ground Fault and Insulation Detection	Included		

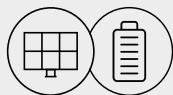
Communications		⁽¹⁾ Consult Gamesa Electric for a specific configuration	
Control ⁽¹⁾	Modbus TCP/IP	⁽²⁾ With derating from 40°C [104°F]	
Monitoring ⁽¹⁾	Modbus TCP/IP	⁽³⁾ Up to 4,000m [13,123 ft] with derating as optional	
Webserver	Included	⁽⁴⁾ Consult Gamesa Electric for other Standards/Directives	

Standards/Directives⁽⁴⁾				
IEC 62109-1	CEA 2019	NEMA 250-2014	CEI 016	CEC 2015
IEC 62109-2	Arrêté du 9 juin 2020	UTE C 15-400	EirGrid V10:2020	VDE-AR-N 4110 4120 4130 2018
IEC 61000-6-2	EN 55011/CISPR11:2019	IEC 61683	NTS 631 v1.1 SENP, v2.1 SEPE	IEC 62477-1:2022
IEEE 1547	IEC 62116	IEC 60529	UL 1741-SB	Portaria nº73/2020
Allegato A.68	ENA G99	UNE-EN 5054 9	CSA C22.2	PTPIREE.28.04.2021



GamesaElectric

Shaping New Energy



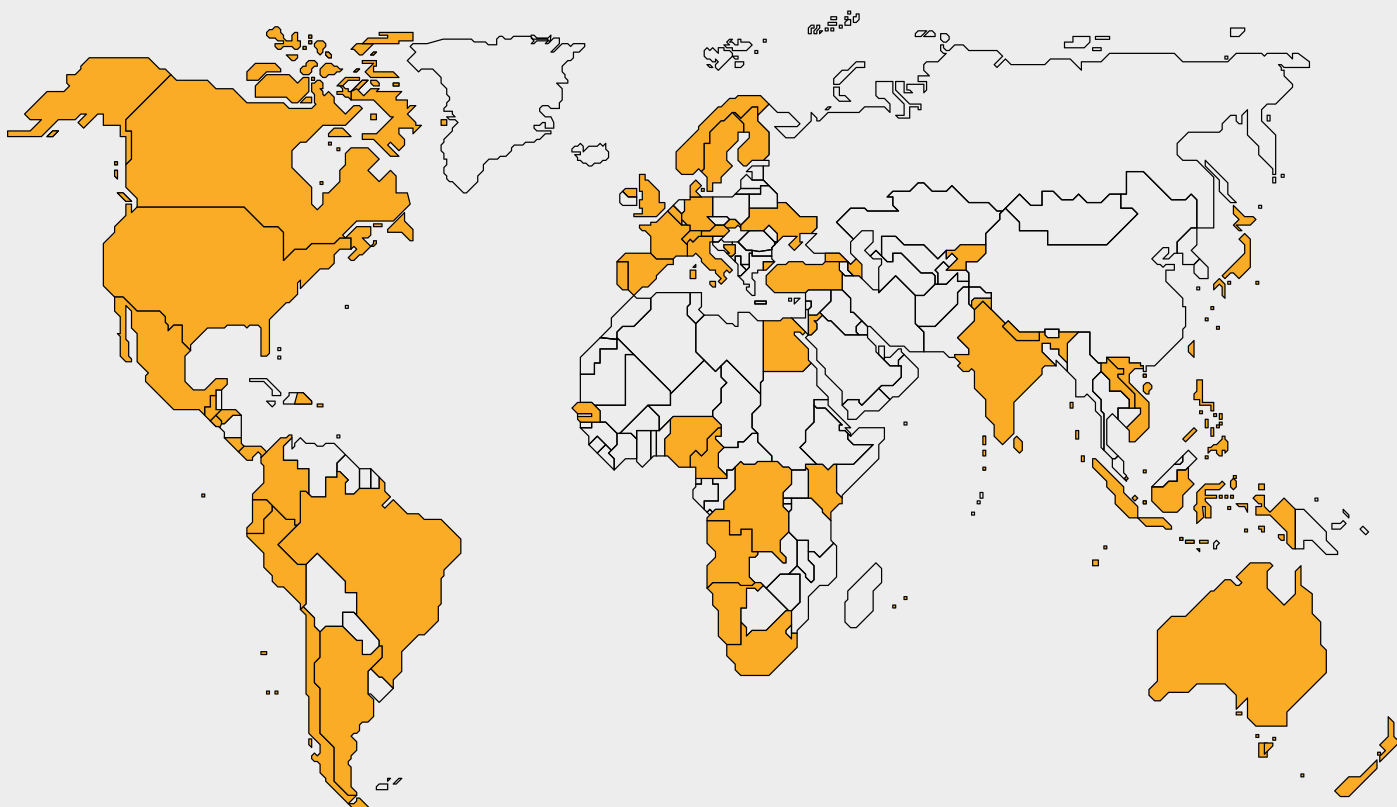
~10 GW SOLAR &
STORAGE ENERGY



+62 GW
WIND POWER



+60
COUNTRIES



Worldwide presence

Albania
Angola
Argentina
Australia
Austria
Azerbaijan
Belgium
Bosnia and
Herzegovina

Brazil
Bulgaria
Cameroun
Canada
Chile
Colombia
Costa Rica
D.R. Congo
Denmark

Denmark (Faroe
Islands)
Dominican Rep.
Ecuador
Egypt
El Salvador
Finland
France
Georgia

Germany
Guatemala
Honduras
India
Indonesia
Italy
Japan
Jordan
Kenya

Kyrgyzstan
Laos
Mexico
Namibia
Nepal
New Zealand
Nigeria
Norway
Panama

Peru
Philippines
Portugal
Rwanda
Senegal
Slovakia
South Africa
Spain
Sri Lanka

Sweden
Switzerland
Taiwan
Turkey
Ukraine
UK
USA
Vietnam



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April 2025