



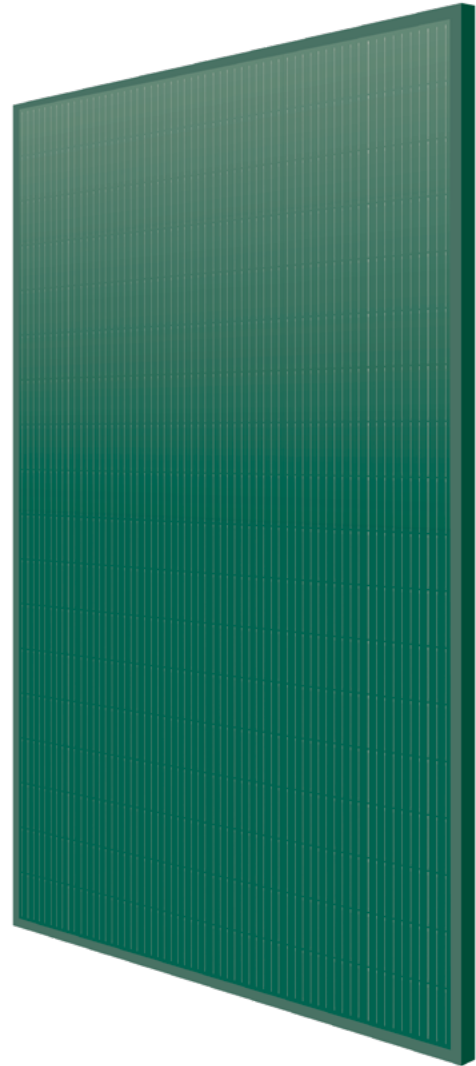
European Experts
in Residential Modules

Emerald TOPCon N-type

FRONT SIDE

420W

› Double Glass Bifacial



+20.0%

Module efficiency

Module efficiency up to 21.02 %



Colour RAL 6033

Perfect integration on demanding BIPV projects



PID resistance

Certified according to IEC TS 62804 standards



Bifacial cell

Bifaciality factor: 80 ± 5 %



Sustainable product

High percentage of recyclable materials



Easy to handle

Comfortable installation thanks to an optimized area size

***European Quality



CE UK
CA



20 Years

Product Warranty

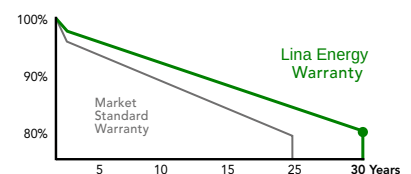
+5 years for Premium Partners

30 Years

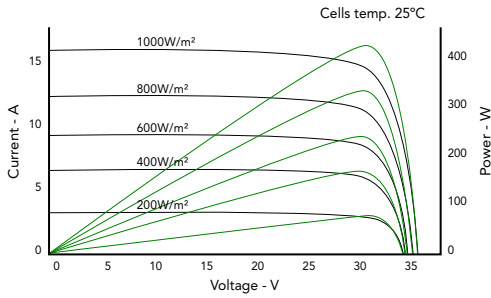
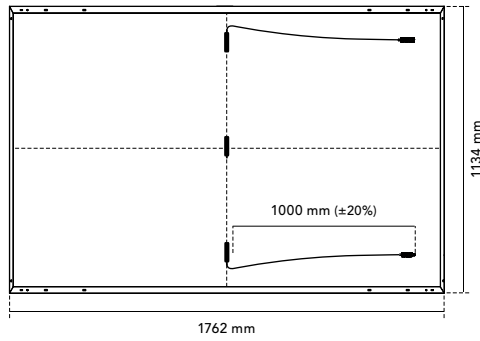
Performance Warranty

Linear Warranty

80% performance at 30 years



LE MEPV — EMERALD DG Bif 420W



Mechanical specification	
Solar cells	N-Type bifacial monocrystalline silicon cells
Front Glass	2 mm anti-reflective surface tempered solar glass
Back Glass	2 mm tempered uncolored solar glass
Frame	Emerald anodized aluminium
Junction Box	IP68, 3 by-pass diodes
Connector	Original MC4-Evo 2
Cable	1000 mm (±20%) length and 4 mm ² section
Dimension	1762 x 1134 x 30 mm (±1%)
Area	2.00 m ²
Weight	25.5 kg

Temperature coefficients	
Temperature coefficient of Isc (α)	0.05 %/°C
Temperature coefficient of Voc (β)	-0.28 %/°C
Temperature coefficient of Pmax (γ)	-0.29 %/°C
Temperature range	-40 °C ~ +85 °C
Nominal operating cell temperature (NOCT)	45 ± 2 °C

MEPV 420

Electrical characteristics	STC	NOCT
Nominal power. Pmax	420 Wp	312 Wp
Short-circuit current (Isc)	15.45 A	12.20 A
Open-circuit voltage (Voc)	35.18 V	33.22 V
Maximum power current (Imp)	15.22 A	12.09 A
Maximum power voltage (Vmp)	27.61 V	25.84 V
Module efficiency	21.02 %	

Electrical characteristics	Bifacial gain 10%
Nominal power. Pmax	462 Wp
Short-circuit current (Isc)	17.00 A
Open-circuit voltage (Voc)	35.18 V
Maximum power current (Imp)	16.73 A
Maximum power voltage (Vmp)	27.61 V

* STC: 1000 W/m², module temperature 25°C, AM 1.5

* NOCT: 800 W/m², ambient temperature 20°C, AM 1.5

Operating parameters	
Maximum voltage	1500 V
Maximum series fuse rating. Ir	25 A
Power output tolerance	0 - +3 %
Voc and Isc tolerance	± 3 %
Fire rating	BROOF (t4) (EN 13501-5) Class A or C (UL 790)
Protection class	Class II (IEC 61140)
Mechanical loads	Front load 5400 Pa, Back load 2400 Pa

Corporate and product certificates	
ECOVADIS rating - Platinum Medal (TOP 1%)	
Solar Industry Forced Labor Prevention Pledge by SEIA	
ISO9001:2015 - Quality Management Systems	
ISO14001:2015 - Environmental Management System	
WEEE compliance in Germany	
PV CYCLE Italy	
IEC 61215 - Terrestrial photovoltaic (PV) modules - Design qualification and type approval	
IEC 61730 - Photovoltaic (PV) module safety qualification	
IEC 61701 - Photovoltaic (PV) modules - Salt mist corrosion testing	
IEC 62716 - Photovoltaic (PV) modules - Ammonia corrosion testing	
IEC TS 62804 - Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation	
Hail resistance HW3/RG3	
Certificate of Factory Production Control (UK) - MCS	
Fire reaction class: 1 - LAPI	
Swissolar Quality Certificate	



NOTE: All information contained in this data sheet is provided for general information purposes only. Product specifications may be subject to technical modifications. Reception installation and use shall comply with the applicable Installation Manual, General Conditions of Sale and Warranty Terms and Conditions.



www.lina-energy.com
info@lina-energy.com
+359 893916630
Izgrez 8000, Burgas
Bulgaria

Crafting a brighter future

Since 2016, our primary focus has been on providing high-quality, durable photovoltaic module that enable us and future generations to sustainably generate clean energy for the preservation of our planet.