

Double-sided Generation at its best

Fly Solartech revolutionises photovoltaic engineering with the new FSGE bifacial solar panel, combining semi-flexible module technology with two-sided cells to outperform any conventional panel in both efficiency and output.



Record-breaking efficiency

Frontal efficiency at 23.1%, 22.5% posterior



New bifacial technology

HTJ cells are monocrystalline cells paired with micro-amorphous silicon to capture an increased spectrum of available light



Low temperature coefficient -0.31% / ° C

For an extraordinary production even in hot environments



Seven-layer design

FLY' own invention is unrivalled by conventional five-layer panels with the New F-EFTE2, scratch-resistant with light orientation system



Walkable

Thanks to the properties of high-strength polymers



Crack resistant

GWIRE technology significantly reduces potential for breakage - seamless no welding cells contact



Lightweight and ultrathin

Nanoscale silicon film means the panel is less than 1/8th the weight of a traditional panel, with a thickness of only 1.5mm



Flexible and bendable

Highly adaptable to almost any surface shape



Increased weather resistance

Developments in the engineering of interior parts create a longer-wearing panel, resistant to greater extremes in temperature and more durable against environmental hazards



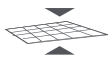
Certified

IEC 61701:2011 Salt mist - IEC 61215 10.17 - powered by KIWA



Made in Italy

Designed and produced in Italy to meet the highest standards of quality and performance



Thin

Only 1,5 mm



To create this patented technology, a crystalline silicon cell wafer is coated with layers of p-doped and N-type amorphous silicon film, and sealed with a clear, anti-reflective backsheet. The passivating silicon layer reduces surface state density by hydrogenation, as well as fabricating record-low values for the saturation-current density. It's so effective at reducing recombination that this cell can reach energy conversion efficiencies of well over 23% - a record-breaking figure compared to traditional cells. The transparent backsheet of conductive oxide (TCO) allows reflected light to reach the rear of the HTJ cell, producing over 30% more electricity than single-sided panels.



GIOCO SOLUTIONS®



IEC 61701:2011
Nebbia salina



IEC 61215
10.17

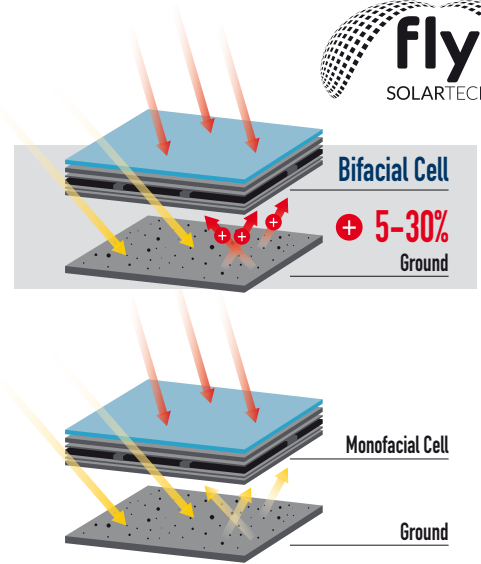


powered
by KIWA

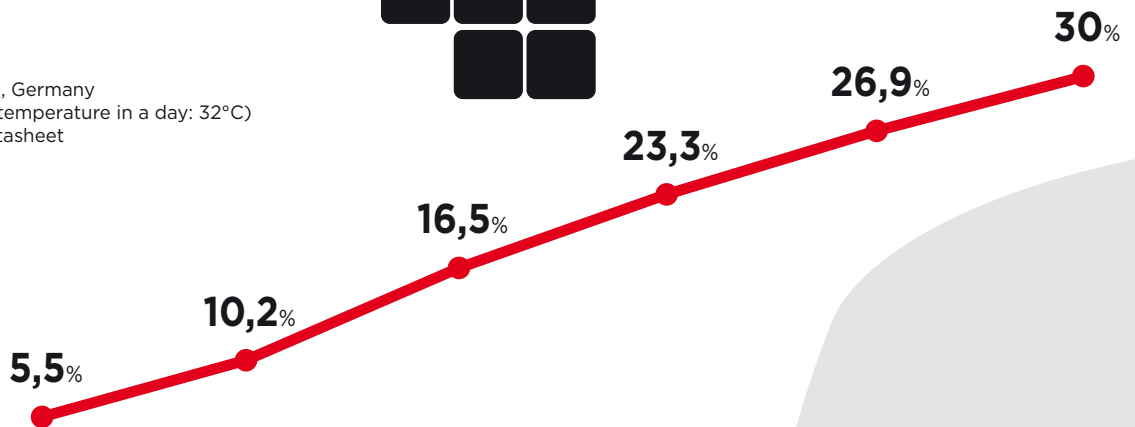


Higher Absorption, Higher Yield

To create this patented seven-layer cell, a crystalline silicon cell wafer is coated with layers of p-doped and N-type amorphous silicon film, and sealed with a clear, anti-reflective backsheet. The passivating silicon layer reduces surface state density by hydrogenation, as well as fabricating record-low values for the saturation-current density. It's so effective at reducing recombination that this cell can reach energy conversion efficiencies of well over 23% - a record-breaking figure compared to traditional cells. The transparent backsheet of conductive oxide (TCO) allows reflected light to reach the rear of the HTJ cell, producing over 30% more electricity than single-sided panels.



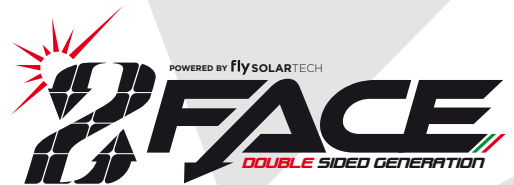
*PV Syst simulation result
*Region: Bayern Munchen, Germany
*One day in July (highest temperature in a day: 32°C)
*Data source: Pan file, Datasheet



Albedo (%)	15	30	50	70	85	
	Soil, Meadows	Dirt, Gravel, Concrete	Sand	Snow	White membrane	Water reflection

Electrical characteristics	FGSE147L		FGSE130L		FGSE115	
	FRONT SIDE	BACK SIDE	FRONT SIDE	BACK SIDE	FRONT SIDE	BACK SIDE
V pmax (V)	17,17	16,67	15,26	14,82	13,36	12,97
I pmax (A)	8,67	8,42	8,58	8,33	8,62	8,37
Pmax (Watt)	148,92	144,58	131,04	127,22	115,13	111,77
Vca (V)	19,71	19,14	17,52	17,01	15,33	14,88
Icc (I)	9,25	8,98	9,15	8,89	9,19	8,92
Efficiency %	18,26	17,73	17,65	17,13	17,77	17,25
Dimensions						
H (mm)	1510		1375		1200	
L (mm)	540		540		540	
S (mm)	1,5		1,5		1,5	
Weight Kg	2,04		1,86		1,5	

Temperature coefficients
Vca -0,249%/°C
Icc 0,037%/°C
Pmax -0,31%/°C



MORE ENERGY. ALL APPLICATIONS



FIXING OPTIONS



STRUCTURAL BI-ADHESIVE



TENAX



STAINLESS STEEL EYELETS



ZIP



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