

# FVG 36-125

## MONOCRYSTALLINE 5"



**Silicon-wafer Monocrystalline photovoltaic module with power peak from 85 W to 100 W**

### APPLICATIONS



Residential, commercial and agricultural



12V stand-alone systems (or multiples)

The FVG 36-125 modules are ideal for stand-alone systems, public and private lighting, survey and data transmission systems, road signs, telecommunication and other specific applications

### FEATURES



Excellent performances even during low solar radiation (cloudiness, morning or evening)



3.2 mm solar-grade tempered prismatic glass



Heavy load mechanical resistance: TÜV certified (5.400 Pa tested against snow and 2.400 Pa test against wind)



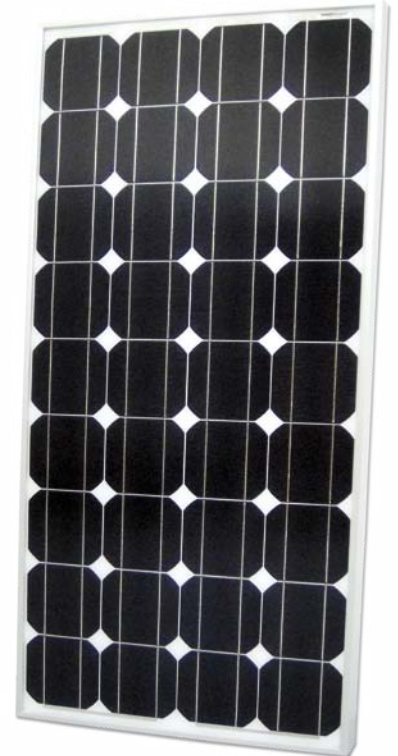
Strict and continuous quality controls during all the production phases up to shipment



High efficiency level up to 15.60%



Custom-made modules even in "All Black" version



### ITALIAN WARRANTY

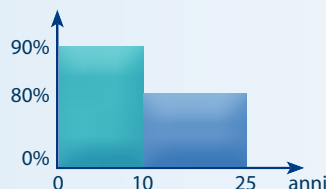
**5 years commercial warranty – 25 years performance warranty**

Commercial

- Standard 5 years on materials and manufacturing defects
- Can be extended to 10 years on request

Performance

- Power not less than 90% of power peak during the first 10 years
- Power not less than 80% of power peak during the subsequent 15 years



### JUNCTION BOX

Strong and reliable with 2 by-pass diodes. High performance IP67 connectors guarantee maximum safety and duration over time to maximise the power generated by the modules.



### ELECTRICAL FEATURES

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STC					
Type	Model	xxx Rated Power [W]			
<b>FVG 36-125</b>	<b>FVG xxxM-MC*</b>	<b>85</b>	<b>90</b>	<b>95</b>	<b>100</b>
Module Efficiency	$\eta_m$ (%)	13.27	14.05	14.83	15.60
Cell Efficiency	$\eta_c$ (%)	15.90	16.80	17.50	18.00
Power Peak	$P_m$ (W)	85	90	95	100
Maximum Power Voltage	$V_m$ (V)	18.50	18.50	18.65	18.75
Maximum Power Current	$I_m$ (A)	4.60	4.88	5.10	5.35
Open Circuit Voltage	$V_{oc}$ (V)	22.20	22.30	22.30	22.35
Short Circuit Current	$I_{sc}$ (A)	5.13	5.37	5.50	5.70
Maximum System Voltage	(VDC)	700			
Power Output Tolerance	(%)	- 3 / + 3			
Max-Series Fuse	(A)	10			
Operating/Storage Temp.	(°C)	- 40 ~ + 85			
Dielectric Insulation Voltage	(VDC)	3,000 max			
Code	MFM	50167	50168	50169	50170
STC: Irradiance 1,000 W/m <sup>2</sup> , module temperature 25 °C, AM=1.5 Power measurement tolerance: ± 3%					

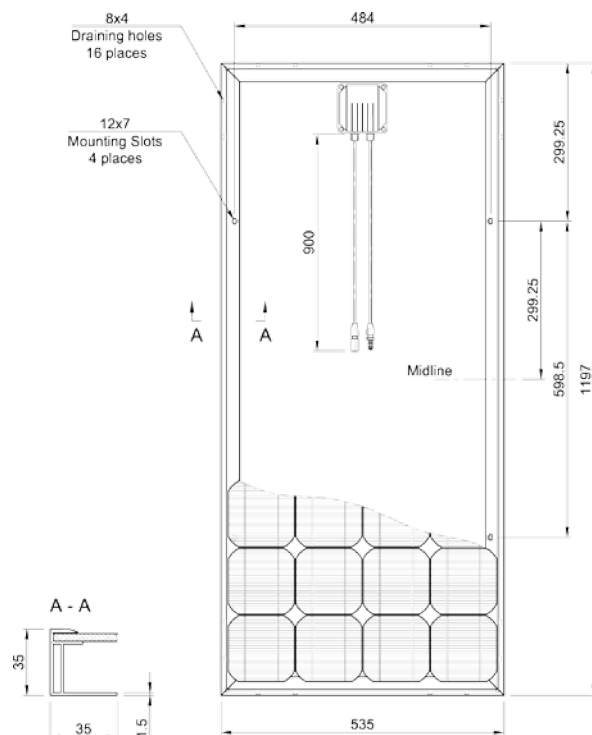
NOCT					
Typical Power at NOCT	$P_m$ (W)	62	66	70	74
Maximum Power Voltage	$V_m$ (V)	16.50	16.55	16.64	16.80
Maximum Power Current	$I_m$ (A)	3.80	4.00	4.30	4.40
Open Circuit Voltage	$V_{oc}$ (V)	20.58	20.63	20.70	20.80
Short Circuit Current	$I_{sc}$ (A)	4.52	4.60	4.66	4.75
NOCT: Irradiance 800 W/m <sup>2</sup> , ambient temperature 20 °C, wind speed 1 m/s Power measurement tolerance: ± 3%					

### TEMPERATURE CHARACTERISTICS - STC

NOCT - Nominal Operating Cell Temperature	(°C)	45 ± 2
$P_m$ Temperature Coefficient	(%/°C)	- 0.45
$V_{oc}$ Temperature Coefficient	(%/°C)	- 0.34
$I_{sc}$ Temperature Coefficient	(%/°C)	0.05

### MECHANICAL FEATURES

Cell Size	(mm)	125 x 125
Number of cells		36 cells - monocrystalline silicon
Module Dimensions	(mm)	1,197 x 535 x 35
Module Weight	(kg)	9.2
Front Glass		3.2 mm tempered glass
Frame		anodized aluminium alloy
Junction box		2 by-pass diodes
Connectors		IP67 type MC3 or MC4
Output Cables	(mm)	900



### PACKING FEATURES

Carton Dimensions	(mm)	1,215 x 570 x h175
Pallet Dimensions (small)	(mm)	1,200 x 800 x h1,900
Pallet Dimensions (large)	(mm)	1,650 x 1,100 x h2,100
Pallet Weight	(kg)	400 (large 950)
1 Carton		4 modules
1 Euro pallet		10 cartons (40 modules)
1 Large pallet		25 cartons (100 modules)
Container Loading Capacity	20(ft)	600 modules (6 pallets)
	40(ft)	1,400 modules (14 pallets)

\* xxx suffix indicates Rated Power [W]