

# FVG 72-156

## POLYCRYSTALLINE 6"



**Silicon-wafer Polycrystalline photovoltaic module with power peak from 270 W to 285 W**

### APPLICATIONS



Residential, commercial and agricultural



24V stand-alone systems (or multiples)



PV parks

### FEATURES



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



4 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 14.68%



Custom-made modules even in "All Black" version



Positive tolerance on power peak of individual module



### ITALIAN WARRANTY

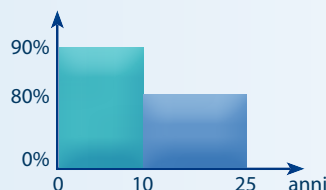
**5 years commercial warranty – 25 years performance warranty**

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



### ELECTRICAL FEATURES

		STC			
Type	Model	xxx Rated Power [W]			
<b>FVG 72-156</b>	<b>FVG xxxP-MC*</b>	<b>270</b>	<b>275</b>	<b>280</b>	<b>285</b>
Module Efficiency	$\eta_m$ (%)	13.90	14.17	14.43	14.68
Cell Efficiency	$\eta_c$ (%)	15.45	15.80	16.15	16.50
Power Peak	Pm (W)	270	275	280	285
Maximum Power Voltage	Vm (V)	36.00	36.30	36.40	36.50
Maximum Power Current	Im (A)	7.50	7.60	7.70	7.85
Open Circuit Voltage	Voc (V)	44.60	44.70	44.80	45.00
Short Circuit Current	Isc (A)	8.18	8.25	8.33	8.39
Maximum System Voltage	(VDC)	1,000			
Power Output Tolerance	(W)	0 / + 5			
Max-Series Fuse	(A)	20			
Operating/Storage Temp.	(°C)	- 40 ~ + 85			
Dielectric Insulation Voltage	(VDC)	3,000 max			
Code	MFP	50302	50303	50304	50305
STC: Irradiance 1,000 W/m <sup>2</sup> , module temperature 25 °C, AM=1.5 Power measurement tolerance: ± 3%					

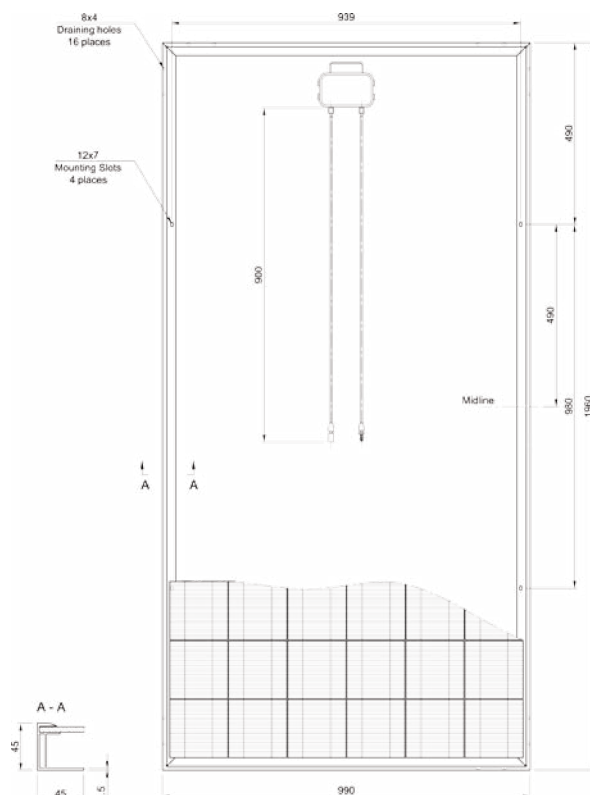
		NOCT			
Typical Power at NOCT	Pm (W)	196	200	204	208
Maximum Power Voltage	Vm (V)	31.70	31.90	32.00	32.10
Maximum Power Current	Im (A)	6.19	6.30	6.39	6.48
Open Circuit Voltage	Voc (V)	40.50	40.60	40.80	41.00
Short Circuit Current	Isc (A)	6.65	6.69	6.74	6.79
NOCT: Irradiance 800 W/m <sup>2</sup> , ambient temperature 20 °C, wind speed 1 m/s Power measurement tolerance: ± 3%					

### TEMPERATURE CHARACTERISTICS - STC

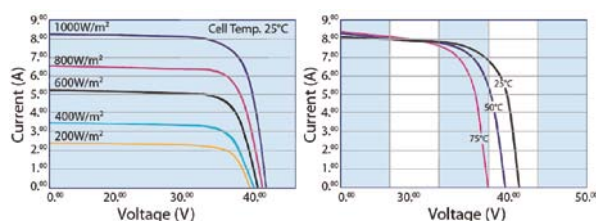
NOCT - Nominal Operating Cell Temperature	(°C)	45 ± 2
Pm Temperature Coefficient	(%/°C)	- 0.44
Voc Temperature Coefficient	(%/°C)	- 0.33
Isc Temperature Coefficient	(%/°C)	0.055

### MECHANICAL FEATURES

Cell Size	(mm)	156 x 156
Number of cells		72 cells - polycrystalline silicon
Module Dimensions	(mm)	1,960 x 990 x 45
Module Weight	(kg)	27
Front Glass		4 mm tempered glass
Frame		anodized aluminium alloy
Junction box		6 by-pass diodes
Connectors		IP67 type MC3 or MC4
Output Cables	(mm)	900



### CURVE CURRENT - VOLTAGE



### PACKING FEATURES

Carton Dimensions	(mm)	2,020 x 1,030 x h105
Pallet Dimensions	(mm)	2,050 x 1,050 x h2,150
Pallet Weight	(kg)	1,180
1 Carton		2 modules
1 Pallet		19 cartons (38 modules)
Container Loading Capacity	20(ft)	190 modules (5 pallets)
	40(ft)	418 modules (11 pallets)

\* xxx suffix indicates Rated Power [W]