

FVG 60-156

MONOCRYSTALLINE 6"



Silicon-wafer Monocrystalline photovoltaic module with power peak from 235 W to 250 W

APPLICATIONS



Residential, commercial and agricultural



PV parks



Architectural integration (French market)

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 15.30%



Custom-made modules even in "All Black" version



Positive tolerance on power peak of every module



ITALIAN WARRANTY

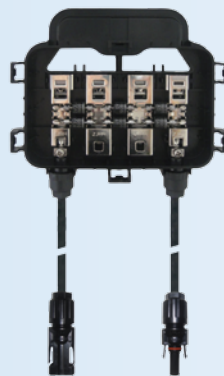
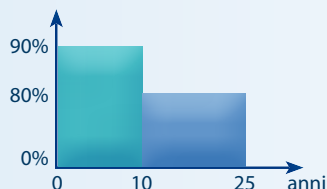
5 years commercial warranty – 25 years performance warranty

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



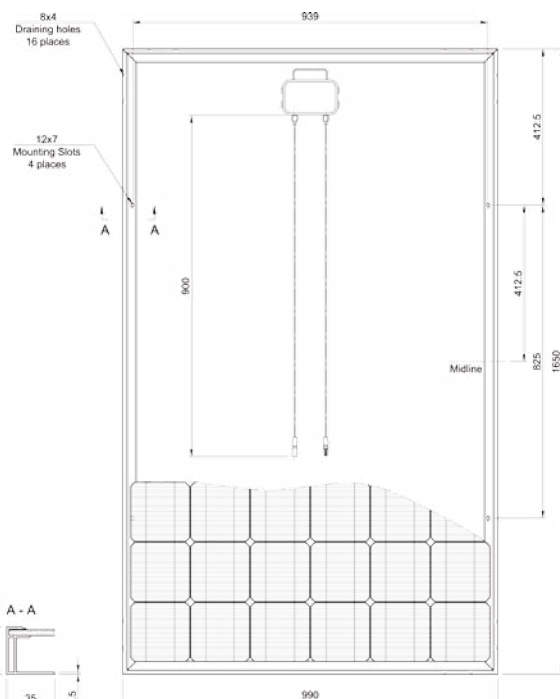
JUNCTION BOX

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.



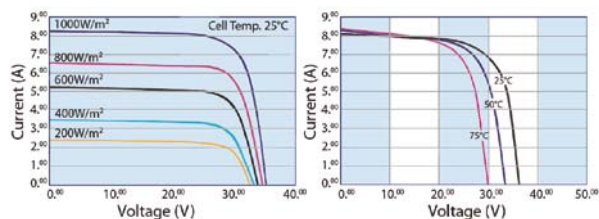
ELECTRICAL FEATURES

		STC			
Type	Model	xxx Rated Power [W]			
FVG 60-156	FVG xxxM-MC*	235	240	245	250
Module Efficiency	η_m (%)	14.39	14.70	15.00	15.30
Cell Efficiency	η_c (%)	16.55	16.90	17.20	17.50
Power Peak	Pm (W)	235	240	245	250
Maximum Power Voltage	Vm (V)	30.30	30.60	30.80	30.95
Maximum Power Current	Im (A)	7.77	7.85	7.97	8.10
Open Circuit Voltage	Voc (V)	37.25	37.50	37.75	37.95
Short Circuit Current	Isc (A)	8.28	8.38	8.48	8.58
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	MFM	50245	50246	50247	50248
STC: Irradiance 1,000 W/m ² , module temperature 25 °C, AM=1.5 Power measurement tolerance: ± 3%					



		NOCT			
Type	Model	xxx Rated Power [W]			
Typical Power at NOCT	Pm (W)	174	177	180	184
Maximum Power Voltage	Vm (V)	27.52	27.66	27.90	28.35
Maximum Power Current	Im (A)	6.35	6.40	6.46	6.50
Open Circuit Voltage	Voc (V)	34.10	34.20	34.30	34.40
Short Circuit Current	Isc (A)	6.78	6.81	6.89	6.95
NOCT: Irradiance 800 W/m ² , ambient temperature 20 °C, wind speed 1 m/s Power measurement tolerance: ± 3%					

CURVE CURRENT - VOLTAGE



TEMPERATURE CHARACTERISTICS - STC

NOCT - Nominal Operating Cell Temperature	(°C)	45 ± 2
Pm Temperature Coefficient	(%/°C)	- 0.45
Voc Temperature Coefficient	(%/°C)	- 0.34
Isc Temperature Coefficient	(%/°C)	0.05

MECHANICAL FEATURES

Cell Size	(mm)	156 x 156
Number of cells		60 cells - monocrystalline silicon
Module Dimensions	(mm)	1,650 x 990 x 35
Module Weight	(kg)	21.50
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

PACKING FEATURES

Carton Dimensions	(mm)	1,700 x 1,050 x h85
Pallet Dimensions	(mm)	1,700 x 1,100 x h2,000
Pallet Weight	(kg)	1,090
1 Carton		2 modules
1 Pallet		22 cartons (44 modules)
Container Loading Capacity	20ft	264 modules (6 pallets)
	40ft	572 modules (13 pallets)

* xxx suffix indicates Rated Power [W]