

# FVG 60-156I

## 6" POLYCRYSTALLINE

**Silicon-wafer Polycrystalline photovoltaic module with power peak from 230 W to 250 W**

### APPLICATIONS



Residential, industrial, commercial and agricultural



PV parks



Architectural integration (CSTB pass innovation)

### FEATURES



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



Anodized aluminium frame with high resistance TÜV certified



15,27%

High efficiency level up to 15.27%



3,2 mm solar-grade tempered prismatic glass which enables a long life of the module



0/+5

Positive tolerance on power peak of individual module



cobat

**Production sites meet all GSE requirements to benefit of feed in tariff of Italian Conto Energia:**

- ISO9001: 2008 Quality management system
- OHSAS 18001: 2007 Occupational health and safety management system
- ISO 14001: 2004 Environmental Management System
- PV CYCLE
- FACTORY INSPECTION ISSUED BY ICIM S.p.A.

### WARRANTY

10 year product warranty on components and manufacturing defects.  
Guarantee of the nominal power peak for the subsequent 25 years.

### CERTIFICATES

IEC 61215

IEC 61730

Certified heavy load mechanical resistance 2.400 Pa against wind

Certified heavy load mechanical resistance 5.400 Pa against snow and ice



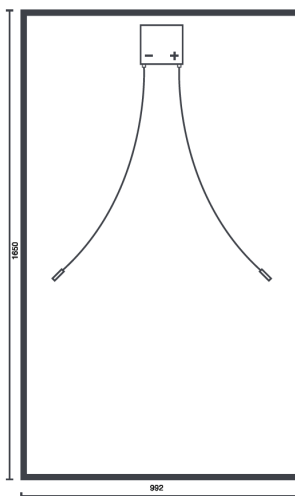
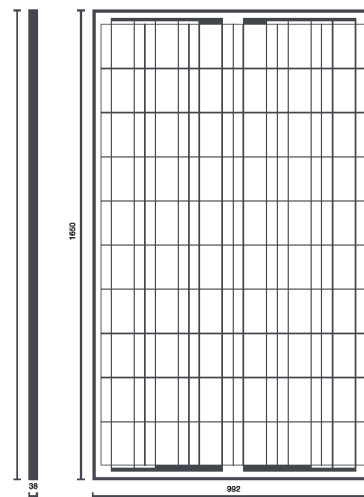
# FVG 60-156I

## 6" POLYCRYSTALLINE

### ELECTRICAL FEATURES

					STC
Type	Model	xxx Rated Power [W]			
FVG 60-156I	FVG xxxP-MC*	230	240	245	250
Module Efficiency	$\eta_m$ (%)	14,05	14,66	14,70	15,27
Cell Efficiency	$\eta_c$ (%)	16,50	17,00	17,40	17,80
Power Peak	Pm (W)	230	240	245	250
Maximum Power Voltage	Vm (V)	28,96	29,43	29,66	29,89
Maximum Power Current	Im (A)	7,94	8,15	8,26	8,36
Open Circuit Voltage	Voc (V)	36,46	37,05	37,34	37,62
Short Circuit Current	Isc (A)	8,55	8,78	8,90	9,01
Maximum System Voltage	(VDC)	1000			
Power Output Tolerance	(W)	0 / + 5			
Max-Series Fuse	(A)	20			
Operating/Storage Temp.	(°C)	- 40 ~ + 85			
Dielectric Insulation Voltage	(VDC)	3000			
Code	MFP	50236IMC	50238IMC	50239IMC	50240IMC

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5  
Power measurement tolerance: ± 3%



### NOCT

					NOCT
Type	Pm (W)	178,55	186,56	190,72	194,68
Typical Power at NOCT	Pm (W)	178,55	186,56	190,72	194,68
Maximum Power Voltage	Vm (V)	28,34	28,86	29,12	29,37
Maximum Power Current	Im (A)	6,30	6,46	6,55	6,63
Open Circuit Voltage	Voc (V)	34,04	34,63	34,92	35,20
Short Circuit Current	Isc (A)	6,91	7,09	7,19	7,28

NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, wind speed 1 m/s  
Power measurement tolerance: ± 3%

### TEMPERATURE CHARACTERISTICS - STC

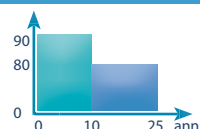
NOCT - Nominal Operating Cell Temperature	(°C)	45 ± 2
Pm Temperature Coefficient	(%/°C)	- 0,44
Voc Temperature Coefficient	(%/°C)	- 0,32
Isc Temperature Coefficient	(%/°C)	0,059

### MECHANICAL FEATURES

Cell Size	(mm)	156 x 156
Number of cells		60 cells - polycrystalline silicon
Module Dimensions	(mm)	1650 x 992 x 38
Module Weight	(kg)	18,00
Front Glass		da 3,2 mm tempered glass
Frame		anodized aluminum alloy
Junction box		3 by-pass diodes
Connectors		IP65 MC4
Output Cables	(mm)	1000

### ITALIAN WARRANTY

10-year commercial warranty  
25-year performance warranty



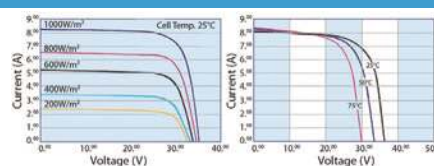
### JUNCTION BOX



3 by-pass diodes

IP65 MC4 connectors  
1000 mm cable length

### CURVE CURRENT - VOLTAGE



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