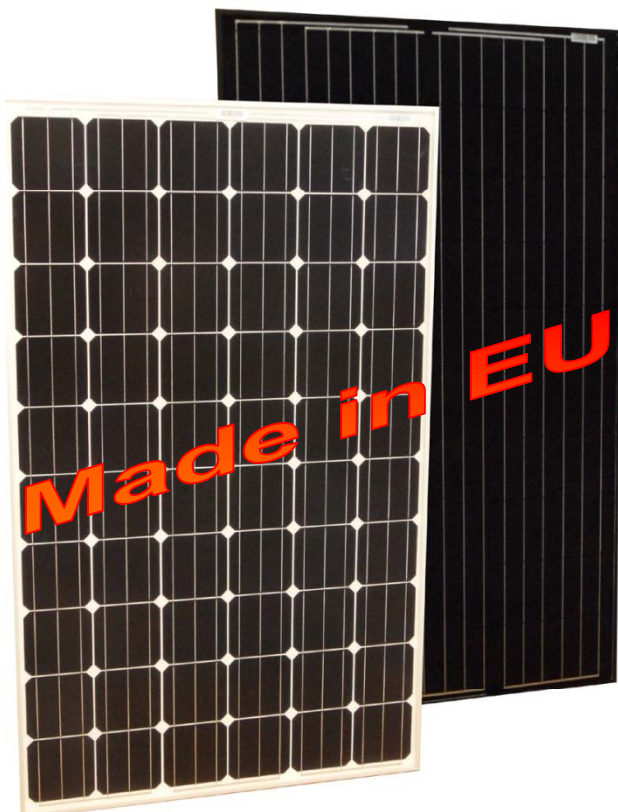


Photovoltaic Modules AM 60

60 cells – Monocrystalline silicon

Silver Wp: 260 - 265 - 270 - 275 - 280 - 285 - 290 - 295 - 300

Black Wp: 260 - 265 - 270 - 275 - 280 - 285 - 290 - 295 - 300



Characteristics & Performance

Available in Silver and Black versions

- **Quality and Robustness**
 - High Quality raw materials
 - Advanced production technology
 - Deep quality and process control
- **Resistance to critical environment**
 - Static load at 600 kg/m² (6000 Pa)
 - Dynamic load at 300 kg/m² - wind 150 km/h
 - Hail with diameter of 25mm and speed of 83 km/h
- **High productivity**
 - Special anti-reflective glass for higher energy yields: up to 4% more
 - Current/power range strictly classified

Product Warranty

- 10 years warranty on manufacturing defects

Performance Warranty

- 12 years warranty on 90% of the nominal power
- 25 years warranty on 80% of the nominal power

Disposal Warranty and Recycling

- COBAT (for Italy)

cobat

System Certifications

Integrated Management System

- Quality - UNI EN ISO 9001:2008
- Environment - UNI EN ISO 14001:2004
- Health & Safety - OHSAS 18001:2007
- Certiquality Certificate of Excellence



Product Tests and Certifications



Safety Class II

- Conformity and Factory Inspection

- "MADE IN EU" Attestation for Italy

- Type Approval

IEC 61215 - Quality and Robustness

IEC 61730 - 1 / 2 - Safety

- Special Component mechanical test

Mechanical load test for BIPV

- Fire Reaction Class (Class I)

UNI 9177



EUROTEST
Laboratori

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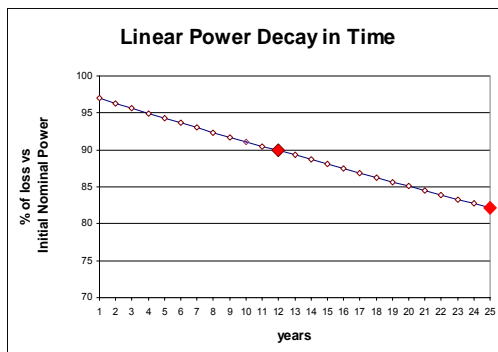


Photovoltaic Modules AM 60

Electrical Features

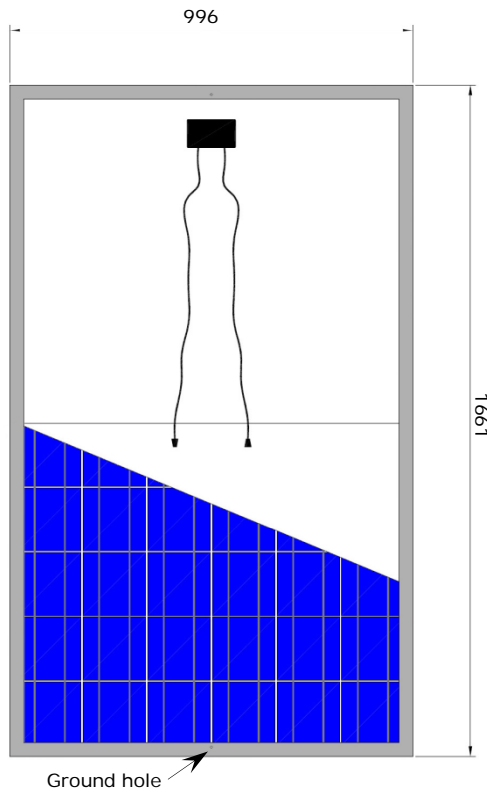
Type		AM 60-260	AM 60-265	AM 60-270	AM 60-275	AM 60-280	AM 60-285	AM 60-290	AM 60-295	AM 60-300
Performance at Standard Conditions (STC): Irradiance 1000W/m²; Module temperature 25°C; AM 1.5										
Model	color	Silver/Black	Silver/Black	Silver/Black	Silver/Black	Silver/Black	Silver/Black	Silver/Black	Silver	Silver
Nominal Power	P _{mpp} (W)	260	265	270	275	280	285	290	295	300
Maximum Power Voltage	V _{mpp} (V)	30,23	30,31	30,38	30,45	30,52	30,60	30,69	31,80	32,01
Maximum Power Current	I _{mpp} (A)	8,51	8,64	8,77	8,89	9,02	9,15	9,29	9,28	9,38
Open Circuit Voltage	V _{oc} (V)	38,13	38,2	38,27	38,35	38,42	38,56	38,89	39,46	39,51
Short Circuit Current	I _{sc} (A)	9,14	9,25	9,34	9,43	9,52	9,62	9,69	9,80	9,88
Fill Factor	%	73,8	74,1	74,6	74,9	75,3	75,5	75,7	76,4	76,9
Module efficiency	%	15,50	15,78	16,06	16,31	16,59	16,87	17,18	17,70	18,00
Power Tolerance	%	0 / +3%	0 / +3%	0 / +3%	0 / +3%	0 / +3%	0 / +3%	0 / +3%	0 / +3%	0 / +3%
Working Temperature	(°C)	-40 / 85	-40 / 85	-40 / 85	-40 / 85	-40 / 85	-40 / 85	-40 / 85	-40 / 85	-40 / 85
Maximum Voltage	(V _{oc})	1000	1000	1000	1000	1000	1000	1000	1000	1000
NOCT (Silver)	(°C)	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2	44 +/- 2
NOCT (Black)	(°C)	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2	45 +/- 2
Performance at NOCT: Irradiance 800W/m²; Module temperature 43°C Silver/45°C Black; AM 1.5										
Maximum Power	P _{max} (W)	193,7	197,1	200,2	203,6	207,1	210,9	214,8	218,3	222,1
Maximum Power Voltage	V _{mpp} (V)	29,27	29,34	29,41	29,47	29,55	29,64	30,32	30,71	30,91
Maximum Power Current	I _{mpp} (A)	6,58	6,68	6,74	6,83	6,91	7,01	7,04	7,06	7,14
Open Circuit Voltage	V _{oc} (V)	35,74	35,80	35,88	35,94	36,01	36,09	36,77	36,92	36,96
Short Circuit Current	I _{sc} (A)	7,24	7,31	7,38	7,45	7,52	7,59	7,63	7,67	7,73

All electrical measures ±10% tolerance (but P_{mpp} and NOCT)



Temperature Coefficients

I_{sc} (α) = 0,042 % / °C // 4,15 mA / °C
 V_{oc} (β) = -0,318 % / °C // -0,126 V / °C
 P_{max} (γ) = -0,427 % / °C // -1,281 W / °C



Design

Front	3.2 mm tempered glass
Cells	60 cells – Monocrystalline Silicon - 156 x 156 mm
Encapsulant	EVA (Etylene - Vinyel Acetate co/polymer)
Backsheet	Polymeric laminate - white backside white sunny side for silver modules black sunny side for black modules
Profile	Anodized Aluminium in silver and black versions
Junction Box	IP 65 - Class II - 3 by-pass diodes
Cables	2 unipolar. 4 mm ² wires - 1 m length
Connectors	MC4 compatible - rapid clutch

Dimensions

Length	(mm)	1661
Width	(mm)	996
Profile Thickness	(mm)	34
Weight	(kg)	17.5

Holes

Ground Hole	1 hole with identification label
Drain Holes	2 drain holes on each side

Made in Italy

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