For a Free Quote:
Web: **EnergyPal.com/solar**
Call: **1-800-990-3725**
Email: **contact@energypal.com**

Solar Panel Guide
Specification Data Sheet

Enhance Photovoltaics
Enhance XM-250-280
XM-260

Also available on the web at
EnergyPal.com/enhance-photovoltaics-solar-panels/xm-260

ENHANCE XM
PHOTOVOLTAICS

250W - 280W Monocrystalline Module

Made in Taiwan - **Independent OST Factory Audit Completed**

Enhance Photovoltaic Modules surpass all international recognised quality standards and are produced by one of the world's leading fully vertical integrated photovoltaic module producers on the worlds most advanced European produced fully automated robotic production lines, this process ensures exceptionally high quality, reliability and performance, even in low light conditions.

High Module Efficiency

Module efficiency up to 17.2% achieved through advanced cell technology and manufacturing capabilities.

Extended wind & snow load tests

Pass ASTM E330; Maximum wind speed: 197 km/h (safety factor 3)
(short-side installation ≥ 2400 Pa guaranteed)

Positive Power tolerance

Positive tolerance of up to +4.99 watts delivers higher outputs.

Excellent weak light performance

3.5% relative efficiency reduction at low irradiance (200W/m$^{2)}$

Anti-PID

Potential Induced Degradation Test Certified according to IEC 62804.

Prolonged aging test

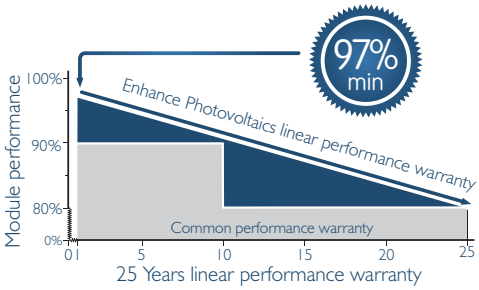
2000 hour damp heat test; 400 Thermal cycles

Corrosive Resistant

Robust design & materials ensures reliability whilst operating under the most extreme conditions such as marine or farming environments.

Superior Protection

Tyco IP 67 rated junction box protects against extreme weather conditions and dust



Comprehensive Warranty

Market leading 12.5 year product warranty

Linear Warranty

Guaranteed 25 year linear performance. Min 97% after the first year, afterwards Max 0.6% reduction p.a up to 25 years.

www.enhance-photovoltaics.com

Specifications are subject to change without notice

ENHANCE XM
PHOTOVOLTAICS

250W - 280W Monocrystalline Module

Electrical Data

		XM-250	XM-255	XM-260	XM-265	XM-270	XM-275	XM-280
Nominal Power Watt P_{max}	W_p	250	255	260	265	270	275	280
Power Output Tolerance P_{max}	W	0~+4.99						
Maximum Power Voltage V_{mpp}	V	29.64	30.09	30.54	30.98	31.44	31.16	31.33
Maximum Power Current I_{mpp}	A	8.44	8.48	8.52	8.56	8.59	8.83	8.95
Open Circuit Voltage V_{oc}	V	38.05	38.13	38.21	38.29	38.37	38.96	39.04
Short Circuit Current I_{sc}	A	9.04	9.05	9.07	9.08	9.09	9.37	9.53
Module Efficiency n_m	%	15.4	15.7	16.0	16.3	16.6	16.9	17.2

*Electrical data under Standard Test Conditions (STC): Cell Temperature of 25°C, Irradiance 1000 W/m², AM 1.5
*Values w/o tolerance are typical numbers
*Specifications subject to change

Mechanical Data

Item	Specification
Dimensions	1640mm (l) x 992mm (w) x 40mm (d)
Weight	18.5 kg
Solar Cell	60 monocrystalline 6" silicon cells (156mm x 156mm)
Front Glass	Anti-reflective tempered solar glass, 3.2mm thickness
Cell Encapsulation	EVA (Ethylene-Vinyl-Acetate)
Back Cover	Composite film
Junction Box	Tyco IP 67 rated
Frame	Anodized aluminium frame, black

Operating Conditions

Item	Specification
Mechanical Load	5400pa (Certified by TUV Rheinland)
Maximum System Voltage	DC 1000 V
Series Fuse Rating	15 A
Operating Temperature	-40 to 85 °C

Temperature Characteristics

Item	Specification
Nominal Operating Cell Temperature	44.1°C ± 2°C
Temperature Coefficient of I_{sc}	0.042 % / °C
Temperature Coefficient of V_{oc}	-0.318 % / °C
Temperature Coefficient of P_{max}	-0.427 % / °C

*Nominal Operating Cell Temperature (NOCT): Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s
*Please refer to Enhance Photovoltaics standard module installation guide before using the product
*Reduction in efficiency from 1000 W/m² to 200 W/m² at 25°C: 3.5% ± 2%

Loading Volume

Item	Specification
Container	728 pcs
Pallet	26 pcs

Contact Details

SOLFEX energy systems
Units 3-5
Charnley Fold Industrial Estate
Bamber Bridge, Preston
Lancashire, PR5 6PS

T - 00 44 1772 312847
F - 00 44 1772 335277
E - photovoltaicsales@solfex.co.uk
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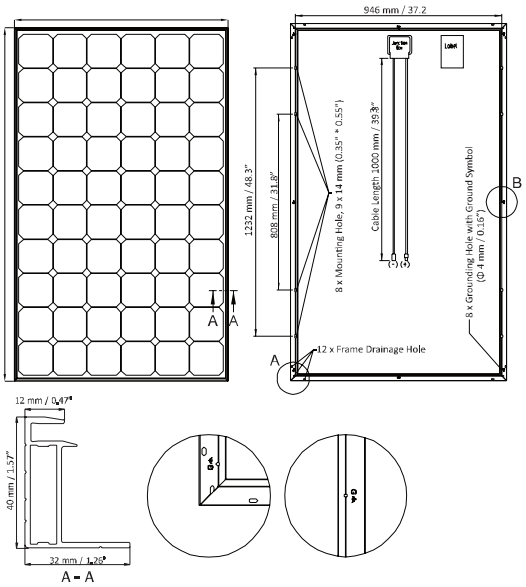
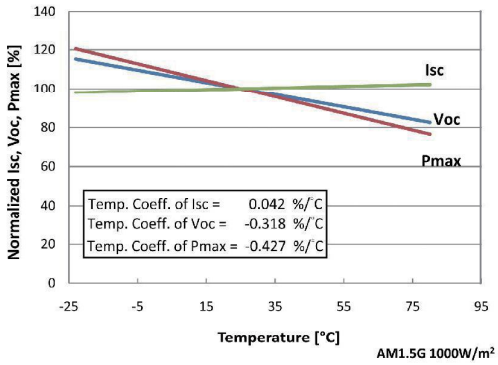
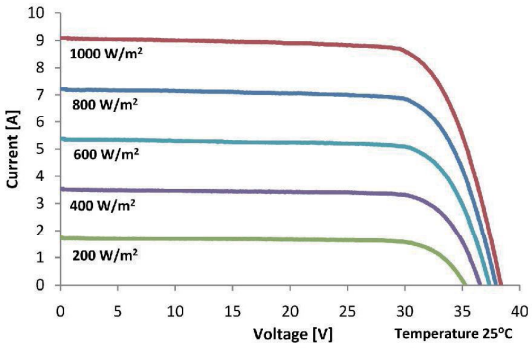
Front & Back View



Dependence on Temperature



Dependence on Irradiance



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