



250M-60

MONO CRYSTALLINE MODULE
230-250 Watt

Universal Solar introduces a brand-new line of high performance modules in wide application.

KEY FEATURES



Our solar cells offer high conversion efficiency to ensure the highest quality

Our high performing modules have an industry low tolerance of 0~+3% (optional)

The modules can withstand high wind-pressure, snow loads and extreme temperatures

Passed IEC 5400 Pa mechanical loading test

QUALITY & SAFETY

Industry leading power output warranty
(12 years/90%, 25 years/80%)

10-year warranty on materials & workmanship (optional)

ISO 9001:2008 (Quality Management System) certified factory

IEC61215, IEC61730 certified products



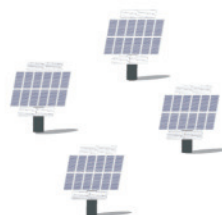
APPLICATIONS



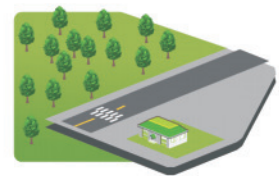
On-grid residential roof-tops



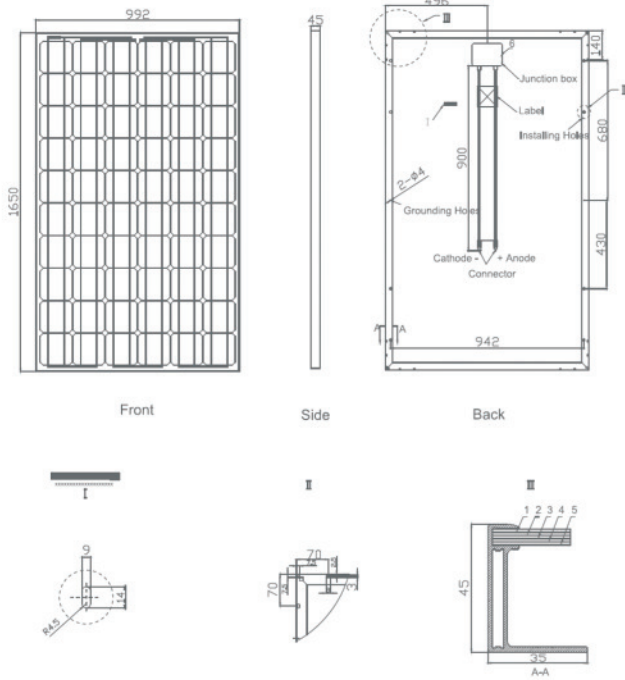
On-grid commercial/
industrial roof-tops



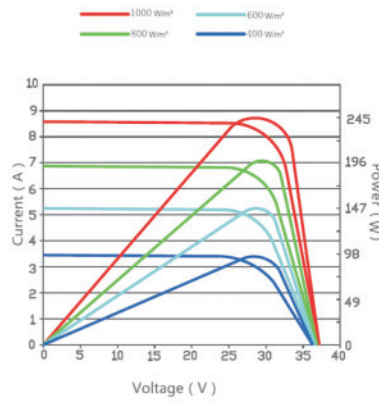
Solar power plants



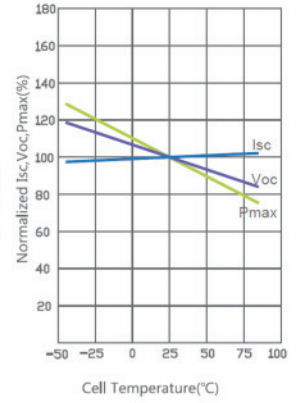
Off-grid systems



Current-Voltage & Power-Voltage Curves (245W)



Temperature Dependence of Isc, Voc, Pmax



Packaging Configuration

(Two boxes + 4pcs addition module = One pallet)

23 pcs/box, 50 pcs/pallet, 700 pcs/40'HQ Container

Mechanical Characteristics

Cell Type	Mono-crystalline 156×156mm (6 inch)
No.of cells	60 (6×10)
Dimensions	1650×992×45mm (64.97×39.06×1.77 inch)
Weight	19.0kg (41.9 lbs.)
Front Glass	3.2mm, High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP65 Rated
Output Cables	TÜV 1×4.0mm² / UL 12AWG, Length:900mm

SPECIFICATIONS

Module Type	1230M	235M	1240M	1245M	1250M
Maximum Power at STC(Pmax)	230Wp	235Wp	240Wp	245Wp	250Wp
Maximum Power Voltage (Vmp)	29.9V	30.0V	30.2V	30.4V	30.6V
Maximum Power Current (Imp)	7.69A	7.83A	7.95A	8.06A	8.17A
Open-circuit Voltage (Voc)	37.1V	37.2V	37.3V	37.4V	37.6V
Short-circuit Current (Isc)	8.20A	8.31A	8.45A	8.58A	8.70A
Module Efficiency(%)	14.05%	14.36%	14.66%	14.97%	15.27%
Operating Temperature(°C)	-40°C~+85°C				
Maximum system voltage	600V (UL) /1000V (IEC) DC				
Maximum series fuse rating	15A				
Power tolerance	0~+3% (optional)				
Temperature coefficients of Pmax	-0.43%/°C				
Temperature coefficients of Voc	-0.30%/°C				
Temperature coefficients of Isc	0.04%/°C				
Nominal operating cell temperature (NOCT)	45±2°C				

STC: Irradiance 1000W/m²

Module Temperature 25°C

AM=1.5

* Power measurement tolerance: ± 3%

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