



SARONIC

Saronic (EU) Power Tech GmbH
ADD: Neuer wall 10, 20354 Hamburg Germany

M60PCS-230W 225W 220W 215W Product Specification



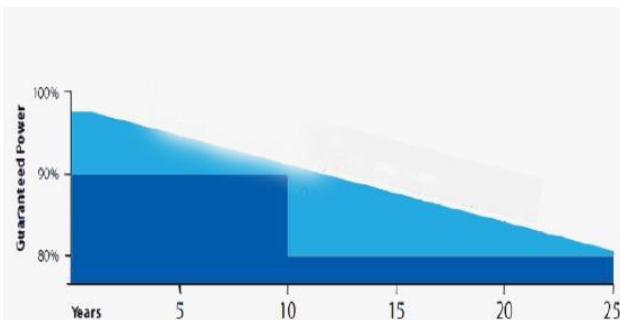
- Industry leading module power output warranty
- International quality, safety and performance certifications
- High-reliability with guaranteed 0/+5 Wp peak power
- Manufacturing facility certified to ISO9001 Quality Management System standards
- Beautiful appearance, good durability & easy installation
- Special design in accordance with requirements of customers

CERTIFICATES

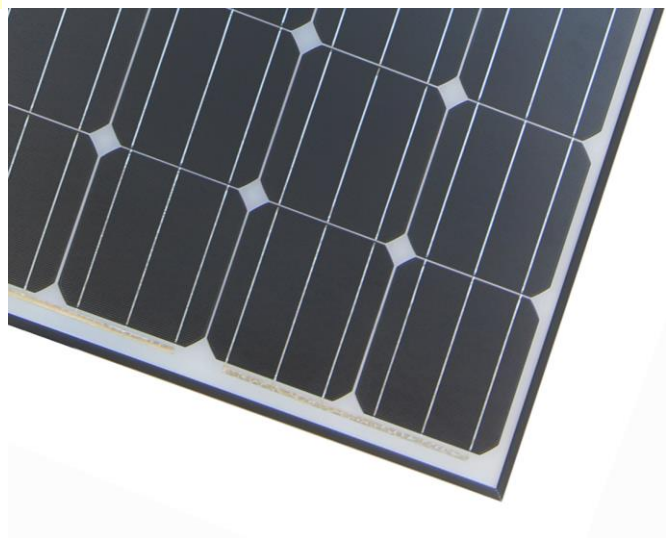


WARRANTIES

- 10 years for product defects in materials & workmanship
- 10 years for 90% of warranted minimum power output
- 25 years for 80% of warranted minimum power output



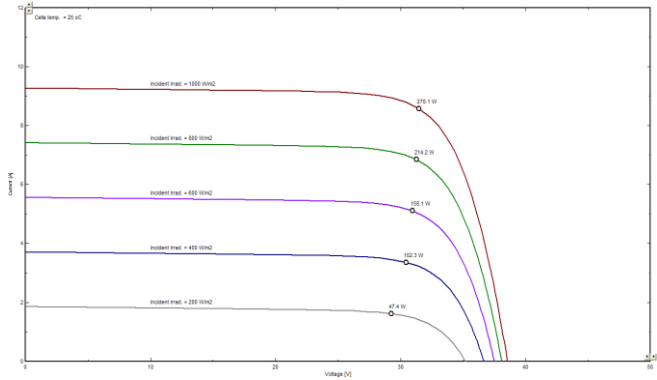
25 years linear warranty



Electrical parameters at Standard Test Conditions
(STC:AM=1.5, 1000W/m², cells Temperature 25 °C)

I-V CURVE

Typical Type	230W	225W	220W	215W
Max-Power (Pmax) w	230W	225W	220W	215W
Max-Power Voltage (Vmp)	30.13	29.95	29.77	29.58
Max-Power Current (Imp)	7.63	7.51	7.39	7.27
Open-Circuit Voltage (Voc)	36.9	36.68	36.46	36.23
Short-Circuit Current (Isc)	8.37	8.24	8.1	7.97
Max-System Voltage	DC1000V			
Cell efficiency (%)	16.5	16.1	15.8	15.4



MECHANICAL DATA

TEMPERATURE CHARACTERISTICS

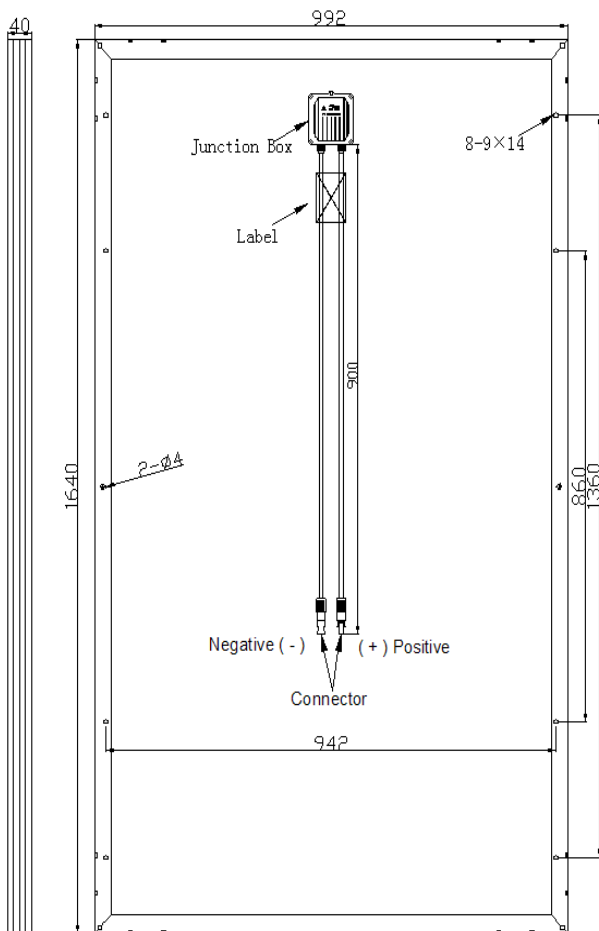
Dimensions	1640*992*40mm
Weight	18kgs
Front Glass	3.2 mm tempered glass
	TUV (2Pfg1169:2007)
Output Cables:	900mm ² (0.006 inches ²), symmetrical lengths 1000 mm
Connectors:	MC4 compatible IP67
cell type:	Mono Crystalline silicon, 156mmx156mm
Number of cells:	60 cells in series

Temp.Coeff.of Isc(TK Isc)	0.037% / °C
Temp.Coeff.of Voc(TK Voc)	(-0.34%) / °C
Temp.Coeff of Pmax(TK Pmax)	(-0.48%) / °C
Operating Temperature	(-40~+85) °C
Nominal Operating Cell Temperature	45 +2 °C

PACKING CONFIGURATION

Container	20'GP	40'GP	40'HQ
Pieces per Pallet	46	46	56
Pallets per Container	6	14	14
Pieces per Container	276	644	784

DIMENSIONS AND STRUCTURE



TESTS, CERTIFICATIONS AND WARRANTIES

Standard tests	IEC 61215, IEC 61730
System certs	ISO 9001, ISO 14001
Certifications	TUV, CE, MCS, PV CYCLE, CEC, CHUBB
Extreme wind and snow loads testing	withstand extreme wind (3800 Pascal) and snow loads (5400 Pascal)
Positive tolerance	0~+3w
Junction Box	IP67 Rated
Warranties	10-year material and workmanship and 25-year output at least 80%.