A9S144M
144 Cells Halfcut Panels

Electroluminescence: Quality control for small microcracks with infrared radiation.

Sun Simulator: 1000 W/m² radiation, 25°C temperature, +5 positive power tolerance and classification according to power tolerance.

Salt Mist Test: According to IEC 61701 ed.2 Salt Resistance

Snow Load Test: Under 5400 Pa snow load resistance according to IEC 61215

Ammonia Corrosion Test: Corrosion resistance according to IEC 62716

Potential Induced Degradation: PID Resistance according to IEC 62804

Wind Load Test: Under 2400 Pa wind load resistance according to IEC 61215

Thermal Cycles Damp Heat Test: 1000 hours damp heat and 200 thermal cycles according to IEC 61215

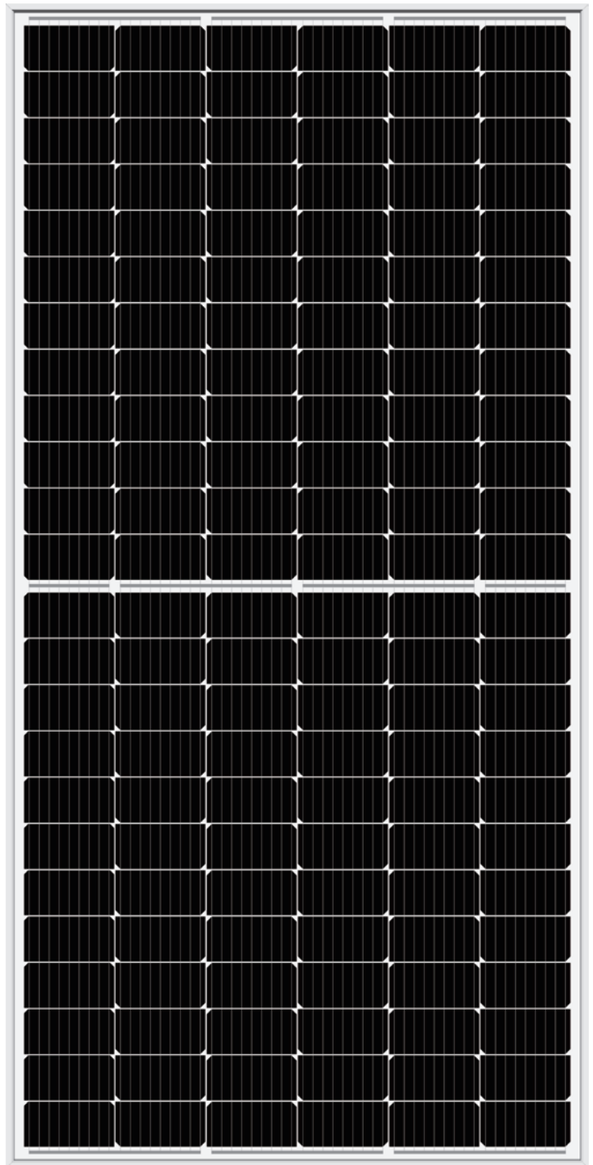
High Performance in Low Radiation : On cloudy days, morning and evening over %3 performance (200 w/m2)

Fill Factor: High Fill Factor value, increased power.
Cell Power: Nine bus bar, with high power.

QR Code System: Real power measurements of modules which have +5 power tolerance ease of viewing with QR Code.

Just in Time Production: Production date is in panels glass, unchangeable and warranty of selling production in that are

TUV AAA+ SIMULATOR WITH QR KOD ONLİNE DATASHEET



ISO 9001 | ISO 14001 | ISO 45001
IEC 61215-1 | IEC 61215-1-1 | IEC 61215-2
IEC 61730-1 | IEC 61730-2 | IEC 61701
IEC 62804 | IEC 62716 | OHSAS 45001

"LOCAL ITEM" MENTIONED IN NUMBER 5346 YEK LAW

Turkey Discover the potential

9BB

Technical Specifications

Electrical Data

		A9S144M 435	A9S144M 440	A9S144M 445	A9S144M 450	A9S144M 455	A9S144M 460
Pmax	Maximum Power	435	440	445	450	455	460
%	Module Efficienty	19,61	19,83	20,06	20,28	20,51	20,73
Immp (A)	Maximum Power Current	10,48	10,49	10,52	10,53	10,66	10,76
Isc (A)	Short Circuit Current	11,19	11,20	11,22	11,23	11,25	11,26
Vmpp (V)	Maximum Power Voltage	41,54	41,96	42,32	42,75	42,79	42,82
Voc (V)	Open Circuit Voltage	49,33	49,38	49,47	49,56	49,72	49,80

Mechanical Data

Subject	Specification
Dimensions	2109 ± 2 mm (L) x 1052 ± 2 mm (W) x 42 ±0,5 mm (D)
Weight	25 Kg
Solar Cell	144 Monocrystalline Perc Type 6" Silicon Cells (166 mm x 83 mm)
Front Glass	Tempered / Tempered ARC Glass
Encapsuland	Ethylene Vinyl Acetate (EVA)
Backsheet	Composite Film, Color White
Junction Box	Renhe / Ekinler Certificate
Frame	Aluminium Frame (Eloxal Coating)

Operating Conditions

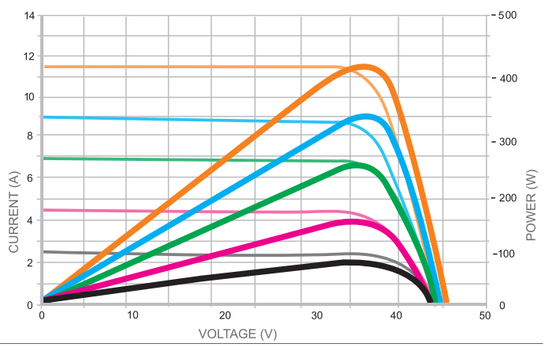
Subject	Specification
Mechanical Strenght	5400 Pa (Certified By KIWA MEYER)
Maximum System Voltage	DC 1500 V
Series Fuse Rating	20 A
Operating Temperature	-40 to 85 °C

Temperature Characteristics

Subject	Specification
Nominal Operating Cell Temperature	41,2 °C ± 2 °C
Temperature Coefficient of Pmpp	-0,311% / °C
Temperature Coefficient of Isc	+0,040% / °C
Temperature Coefficient of Voc	-0,237% / °C

Warranty

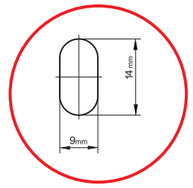
Subject	Specification
Product Warranty	10 Years
Linear Performance Warranty	10 Years, over %90 - 25 Years, over %80
JIT Product	Warranty of selling panels that are produced in last on year.
Power Tolerance	+5W
Online Datasheet on the panel	QR Code System



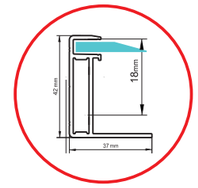
The typical relative change in module efficiency at irradiance of 200 W/m2 in relation to 1000 W/m2 (both at 25 °C and AM 1.5 spectrum) is less than 3 %.

1000 W/m²
800 W/m²
600 W/m²
400 W/m²
200 W/m²

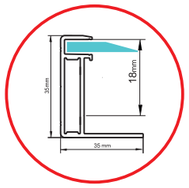
Mounting Slot



Frame



Frame



FRAME CAN BE MANUFACTURED WITH TWO DIFFERENT MEASUREMENT OPTIONS.