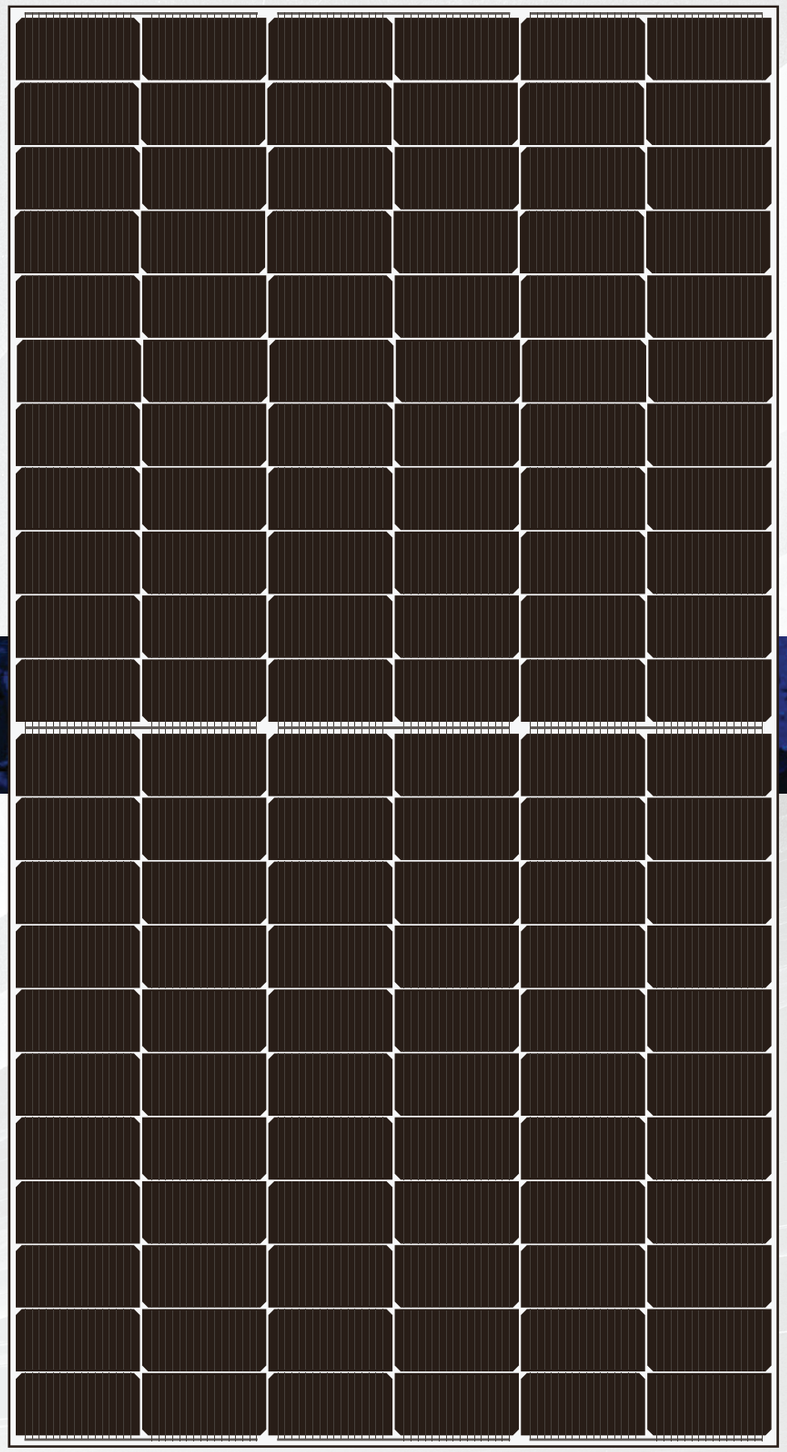
TOPCON

132

CELL

ALFA® SOLAR ENERJİ

MOON SERİSİ



TUBITAK UME AAA + SIMULATOR
WITH QR CODE ONLINE DATASHEET

A16R132T

TOPCON

132
CELL

Technicial Specifications

Turkey
Discover
the potential

"LOCAL ITEM" MENTIONED
IN NUMBER 5346 YEK LAW

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

Electrical Data

	Model	A16R132T 610W	A16R132T 615W	A16R132T 620W	A16R132T 625W	A16R132T 630W
Pmax	Maximum Power	610	615	620	625	630
%	Module Efficiency	22,58	22,77	22,95	23,14	23,32
Impp (A)	Maximum Power Point Current	15,11	15,16	15,18	15,22	15,33
Isc (A)	Short Circuit Current	15,82	15,82	15,84	15,87	15,88
Vmpp (V)	Maximum Power Point Voltage	40,38	40,57	40,85	41,07	41,10
Voc (V)	Open Circuit Voltage	47,62	47,70	47,80	47,90	48,06
	Bifaciality	0,80 ±10%				

Bifacial Gain: Additional gain from the rear compared to the power of the front in he standard test condition. It depends on the mounting of the ground (structure, height, slope angle, etc.) and its albedo.

Electrical Data

	STC/NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	SCT	NOCT
Pmax	Maximum Power	610	467	615	470	620	474	625	478	630	482
Impp (A)	Maximum Power Point Voltage	15,11	12,25	15,16	12,29	15,18	12,31	15,22	12,34	15,33	12,43
Isc (A)	Short Circuit Current	15,82	12,66	15,82	12,66	15,84	12,68	15,87	12,70	15,88	12,71
Vmpp (V)	Maximum Power Point Voltage	40,38	37,82	40,57	38,00	40,85	38,27	41,07	38,47	41,10	38,50
Voc (V)	Open Circuit Voltage	47,62	44,61	47,80	44,78	47,80	44,78	47,90	44,87	48,06	45,02

Standard Test Conditions (STC),
Conditions meant to be under STC are:
Cell Temperature: 25 °C Irradiance: 1000 W/m2 Air Mass: 1.5

Nominal Operating Cell Temperature (NOCT)
Ambient Temperature: 20 °C
Irradiance: 800 W/m2 Air Mass: 1.5 Wind Speed: 1 m/s

Operating Conditions

Subject	Specification
Mechanical Strenght	5400 Pa Snow and 2400 Pa Wind Test Load (Safety F. 1.5 Certified TSE)
Maximum System Voltage	DC 1500 V
Series Fuse Rating	30 A
Operating Temperature	-40 to 85°C

Temperature

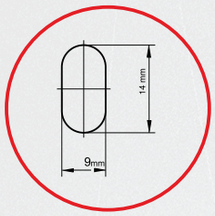
Subject	Specification
Nominal Operating Cell Temperature	41°C ± 2°C
Temperature Coefficient of Pmpp	-0,30% / °C
Temperature Coefficient of Isc	+0,45 % /°C
Temperature Coefficient of Voc	-0,25% / °C

Warranty

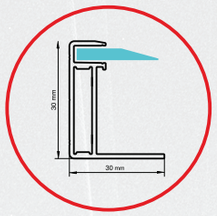
Subject	Specification
Product Warranty	12 Years
Linear Performance Warranty	12 Years , over %94.6 - 25 Years , over %89.4
JIT Product	Warranty of selling panels that are produced in last on year.
Power Tolerance	Positive (+) 5 Watt
Online Datasheet on the panel	QR Code System

A16R132T

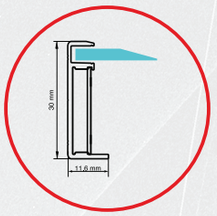
Mounting Slot



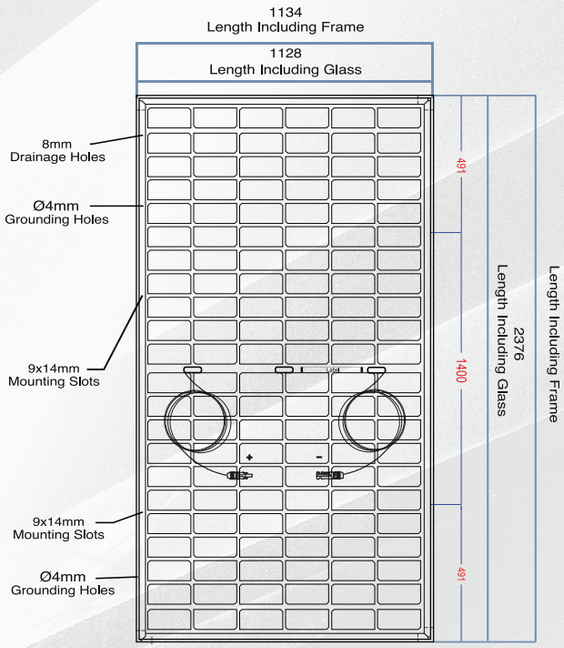
Long Frame



Short Frame



16BB

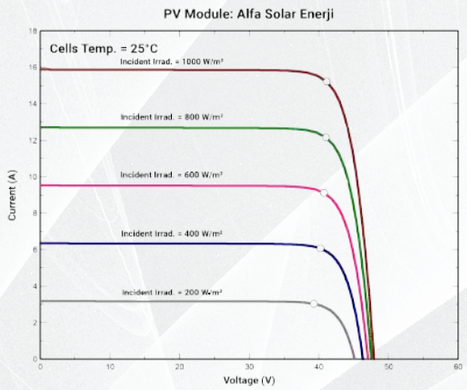


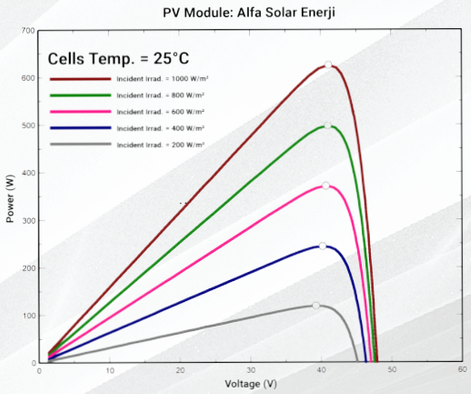
Mechanical Data

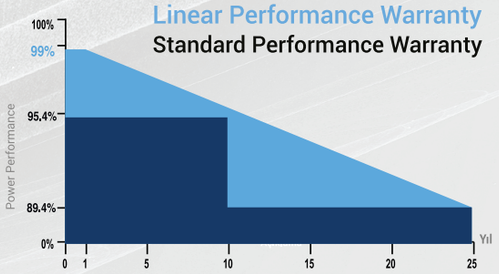
Subject	Explanation
Dimensions	2382 ± 2 mm (L) x 1134 ± 2 mm (W) 30 ± 0,5 mm (D)
Weight	33 Kg
Solar Cell	132 Monocrystalline PERC Silicon Cells
Front Glass	2 mm Semi Tempered Glass / Tempered ARC Glass
Backsheet	2 mm Semi Tempered Glass
Junction Box	IP68 3 Bypass Diyot
Cable Lenght	1.3 Mt
Frame	Aluminium Frame (Eloxal Coating)

Packaging Type

Container	40 HC
Pieces Per Pallet	36
Pieces Per Container	720
Pallet Per Container	20







Electroluminescence: Quality control of the smallest micro-cracks and fractures using infrared radiation.

Solar Simulator: Classification based on power tolerance assurance of ±5 watts under 1000W/m² radiation at 25°C.

Salt Mist Corrosion Test:: Resistance to salt mistaccording to IEC 61701 ed. 2 standards.

Snow Load Test: Resistance to 5400Pa snow load according to IEC 61215 standards.

Ammonia Corrosion Test: Corrosion resistance according to IEC 62716 standards.

Potential Induced Degradation (PID): PID resistance according to IEC 62804 standards.

Wind Load Test: Resistance to wind load according to IEC 61215 standards.

Thermal Cycle Damp Heat Test: 1000-hour damp heat and 200 thermal cycles according to IEC 61215 standards.

Cloudy Days: More than 3% high performance 200W/m²) in the morning and evening hours on cloudy days.

Fill Factor (FF) Value: High Fill Factor value increased power.

Cell Power: 16 Busbar high-efficiency cells.

QR Code System: Easy QR code scanning of real power measurements tested in solar simulators with a +5 tolerance.

Just-in-Time (JIT) Production: A panel sales guarantee for panels with embedded production dates and sales within the last year.