



Mono Perc

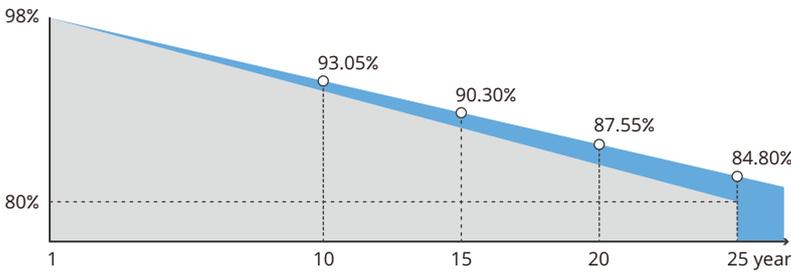
ZECO-72L9

Half-Cell High Efficiency PV Module

Quality Guarantee

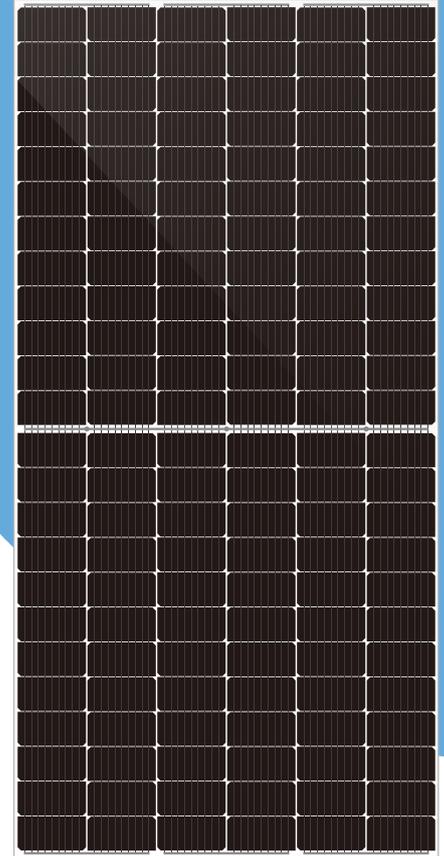
12-year Material & technology warranty

25-year Linear power output warranty



— ZECOMEX solar linear power output guarantee

— Standard linear power output guarantee



430~460W^{0 ~ +5W}

Max
Module
Efficiency

21.39%



Optimal Process Design

166mm+9BB+Half-cut, higher power output



Select Grade A Crystalline Silicon Solar Cells

Grade A crystalline silicon solar cells make high-power output with cost-effective



Stable Generation Performance

Guaranteed 0~+5W positive tolerance and slower power attenuation: first year ≤2%, 0.55% per year from 2-25



Process Upgraded

Lower risk of hot spot and stronger anti-PID ability



Higher Power Gains and Lower Losses

Excellent low irradiance performance and low shadow loss



Strong Environmental Adaptability and Great Durability

Certified by Dust-Sand, Salt-Mist, Ammonia etc. weather resistance tests and enhanced mechanical load: wind load (2400 Pascal) and snow load (5400 Pascal)

Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 / CE / FIDE / INMETRO

ISO 45001-

2018/International standards for occupational health & safety

ISO 14001-

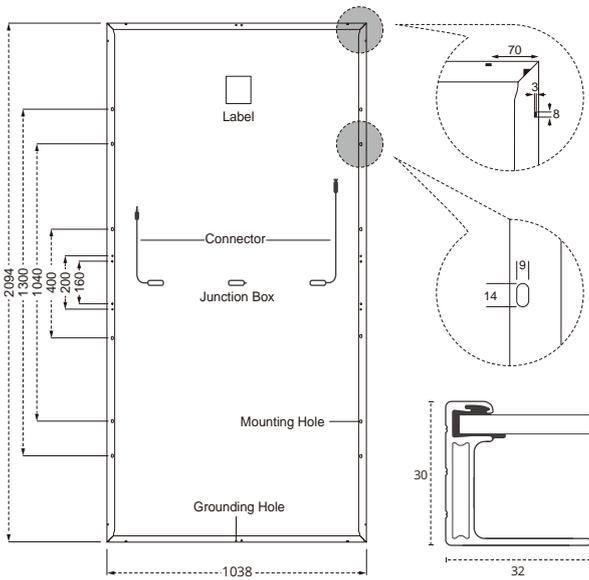
2015/Standards for environmental management system

ISO 9001-

2015/Quality management system

ZECO-72L9 430~460W

Design



Mechanical Specification

Cells Type Mono 166×83mm	Dimension (L×W×T) 2094×1038×30mm
Weight 23.5kg	Packing 36pcs/pallet, 792pcs/40HQ
Cable (Including connector)	4.0mm ² , Portrait: 300mm(+)/400mm(-) Landscape: 1400mm(+)/1400mm(-)
No. of Cells	144 (6×24)
Glass	3.2mm High Transmission, Antireflection Coating
Junction box	IP68, 3 Bypass Diodes
Connector	MC4 Compatible

Operating Parameters

Maximum system voltage	1500V DC
Operating Temperature	-40 ~ +85°C
Maximum series fuse rating	20A
Snow load, frontside	5400Pa
Wind load, backside	2400Pa
Nominal operating cell temperature	45°C±2°C
Application level	Class A

STC-Electrical Characteristics

Module Type	ZECO-72L9							
Maximum Power (Pmax)	430	435	440	445	450	455	460	465
Open-circuit Voltage (Voc)	48.70	48.85	49.00	49.15	49.30	49.45	49.60	49.75
Maximum Power Voltage (Vmp)	41.51	41.66	41.81	41.96	42.11	42.26	42.41	42.56
Short-circuit Current (Isc)	11.23	11.26	11.29	11.32	11.35	11.38	11.41	11.44
Maximum Power Current (Imp)	10.36	10.44	10.52	10.61	10.69	10.77	10.85	10.93
Module Efficiency (%)	19.78	20.01	20.24	20.47	20.70	20.93	21.16	21.39
Temperature Coefficient of Isc	0.05%/°C							
Temperature Coefficient of Voc	-0.31%/°C							
Temperature Coefficient of Pmax	-0.35%/°C							

Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

NOCT-Electrical Characteristics

Maximum Power (Pmax)	320	324	327	331	335	339	342	346
Open-circuit Voltage (Voc)	45.7	45.8	46.0	46.1	46.2	46.4	46.5	46.7
Maximum Power Voltage (Vmp)	38.9	39.1	39.2	39.4	39.5	39.6	39.8	39.9
Short-circuit Current (Isc)	9.07	9.10	9.12	9.15	9.17	9.20	9.22	9.24
Maximum Power Current (Imp)	8.22	8.28	8.35	8.41	8.48	8.54	8.60	8.67

Standard Test Environment : Irradiance 800W/m², Ambient temperature 20°C, Spectrum AM1.5, Wind speed 1m/s

I-V Curve (ZECO-72L9-465W)

