

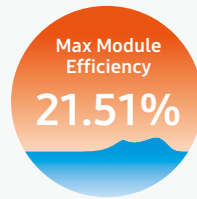
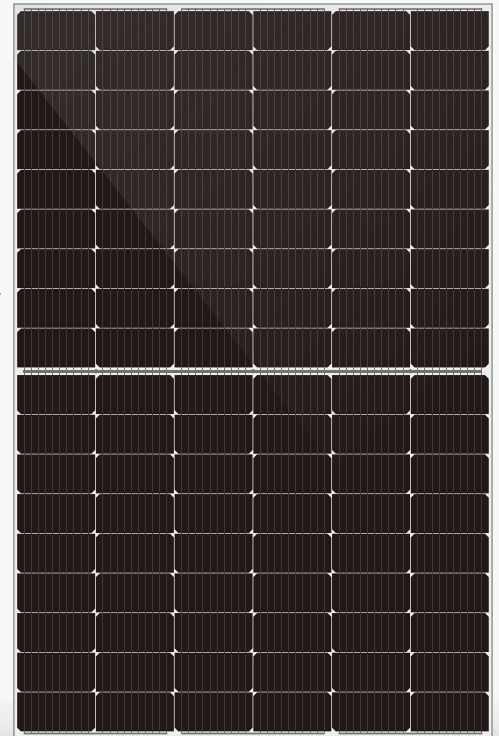


ZECO-54X10

0~+5W

390~420W

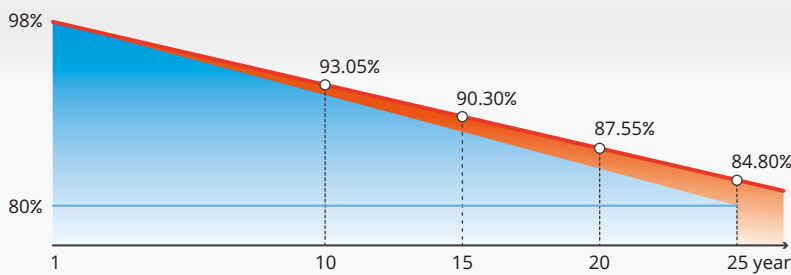
Half-Cell High Efficiency PV Module



Quality Guarantee

12-Year material & technology warranty

25-Year linear power output warranty



— ZECONEX solar linear power output guarantee

— Standard linear power output guarantee



More Power Generation

Larger size of light receiving area and higher module conversion efficiency



10 Busbar Technology

Higher power collection density improves power generation



Stable Generation Performance

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



Higher Power Gains and Lower Losses

Excellent low irradiance performance and low shadow loss



Process Optimized and Upgraded

Lower risk of hot spot and stronger anti-PID ability



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-

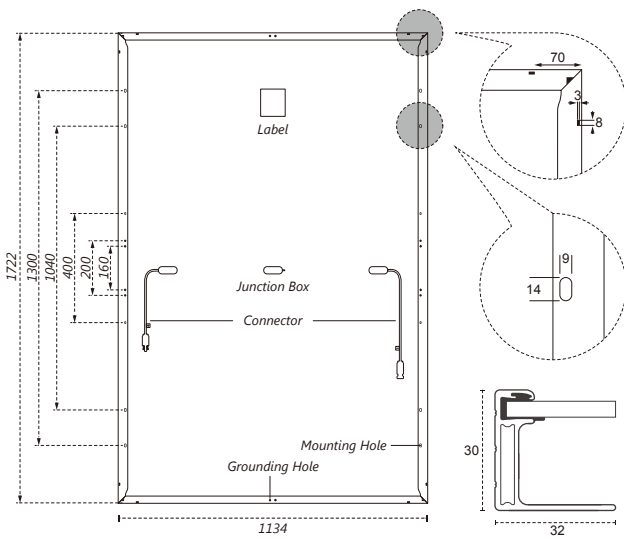
2015/Standards for environmental management system

ISO 9001-

2015/Quality management system

ZECO-54X10 390~420W

Design



Mechanical Specification

Cells Type Mono 182×91mm	Dimension (L×W×T) 1722×1134×30mm
Weight 22kg	Packing 36pcs/pallet, 936pcs/40HQ
Output Cable (Including connector)	4.0mm ² , 300/400mm in length, length can be customized
No. of Cells	108 (6×18)
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	25A
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-54X10						
Maximum Power (Pmax/W)	390	395	400	405	410	415	420
Open-circuit Voltage (Voc/V)	36.4	34.6	36.8	37.0	37.2	37.4	37.6
Maximum Power Voltage (Vmp/V)	30.9	31.1	31.3	31.5	31.7	31.9	32.1
Short-circuit Current (Isc/A)	13.40	13.42	13.48	13.54	13.60	13.66	13.72
Maximum Power Current (Imp/A)	12.60	12.69	12.77	12.85	12.92	13.00	13.07
Module Efficiency (%)	19.97	20.23	20.48	20.74	21.00	21.25	21.51
Temperature Coefficient of Isc	0.05%/°C						
Temperature Coefficient of Voc	-0.31%/°C						
Temperature Coefficient of Pmax	-0.35%/°C						

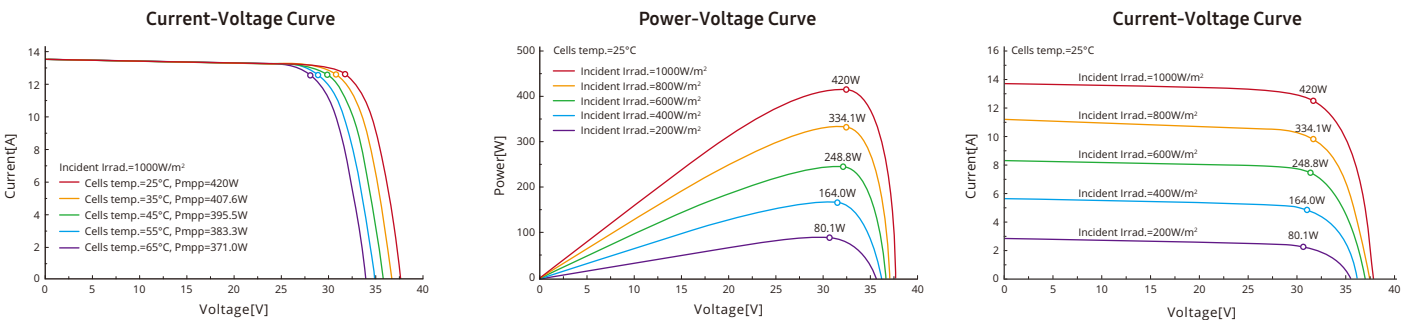
Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

NOCT-Electrical Characteristics

Maximum Power (Pmax/W)	290	294	298	301	305	309	312
Open-circuit Voltage (Voc/V)	34.1	34.3	34.5	34.7	34.9	35.1	35.3
Maximum Power Voltage (Vmp/V)	29.0	29.2	29.4	29.6	29.8	29.9	30.1
Short-circuit Current (Isc/A)	10.79	10.84	10.89	10.94	10.99	11.04	11.09
Maximum Power Current (Imp/A)	10.01	10.07	10.13	10.19	10.25	10.31	10.38

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

I-V Curve (ZECO-54X10-420W)





Mono Perc

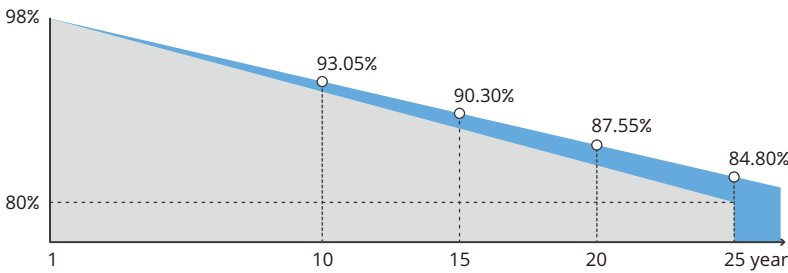
ZECO-72L9

Half-Cell High Efficiency PV Module

Quality Guarantee

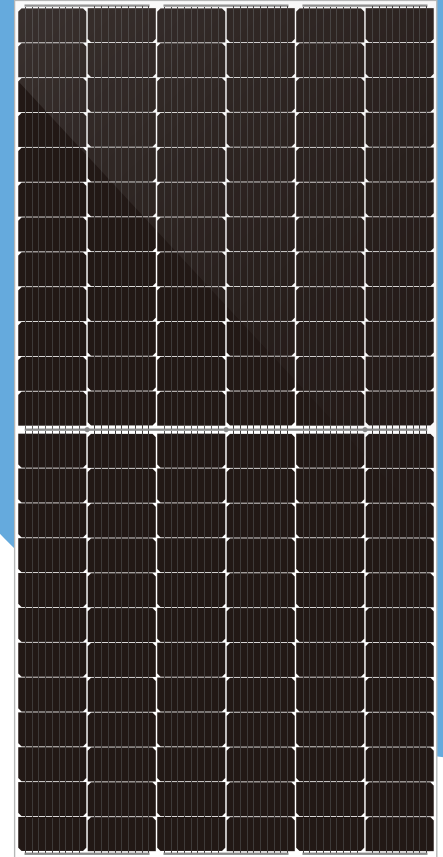
12-year Material & technology warranty

25-year Linear power output warranty



— ZECONEX 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

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Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 / CE / FIDE / INMETRO

ISO 45001-

2018/International standards for occupational health & safety

ISO 14001-

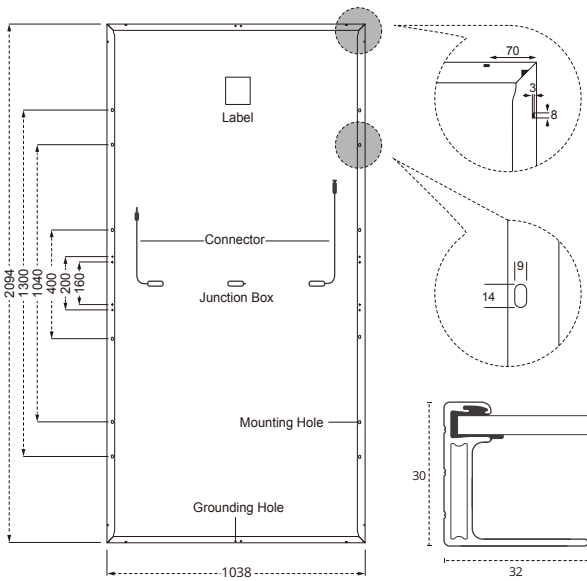
2015/Standards for environmental management system

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							

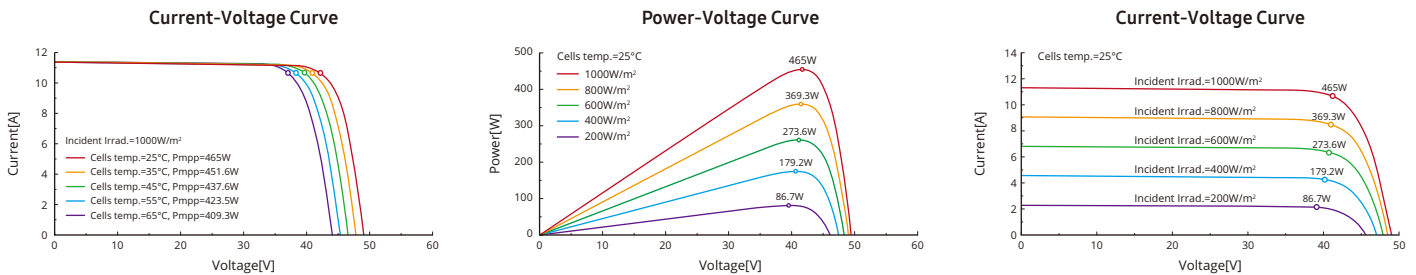
Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

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)



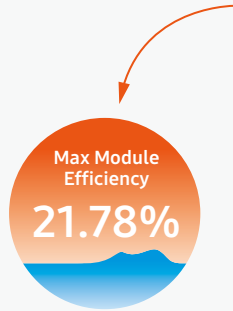
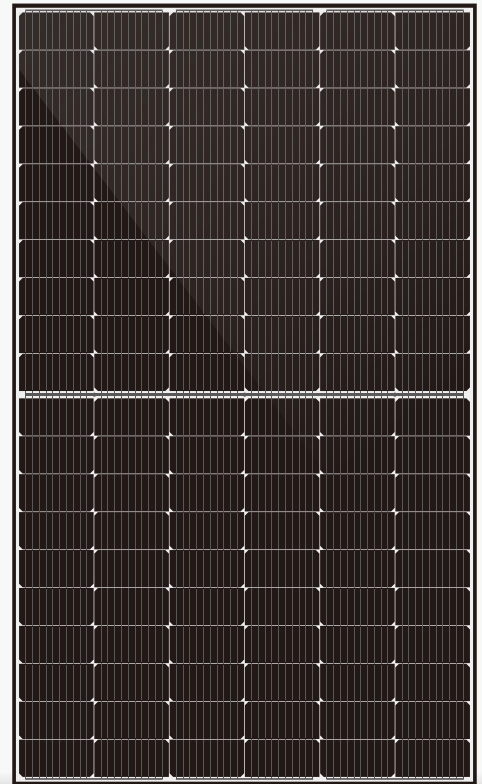


ZECO-60X10

0~+5W

450~470 W

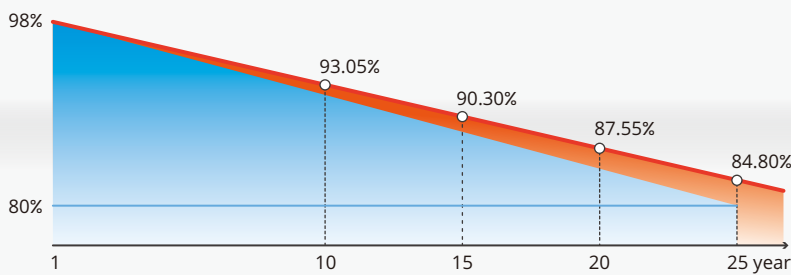
Half-Cell High Efficiency PV Module



Quality Guarantee

12-Year material & technology warranty

25-Year linear power output warranty



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— Standard linear power output guarantee



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10 Busbar Technology

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ISO 45001-

2018/International standards for occupational health & safety

ISO 14001-

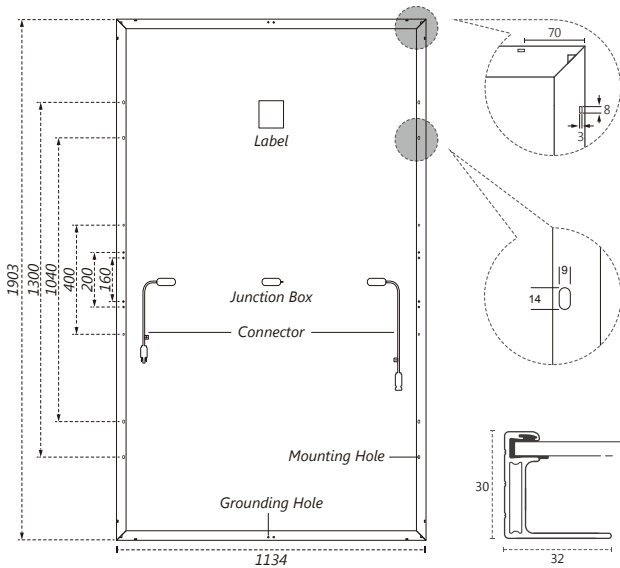
2015/Standards for environmental management system

ISO 9001-

2015/Quality management system

ZECO-60X10 450~470W

Design



Mechanical Specification

Cells Type Mono 182×91mm	Dimension (L×W×T) 1903×1134×30mm
Weight 23.8kg	Packing 36pcs/pallet, 864pcs/40HQ
Output Cable (Including connector)	4.0mm ² , 300/400mm in length, length can be customized
No. of Cells	120 (6×20)
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	25A
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-60X10				
Maximum Power (Pmax/W)	450	455	460	465	470
Open-circuit Voltage (Voc/V)	41.6	41.8	42.0	42.2	42.4
Maximum Power Voltage (Vmp/V)	35.2	35.4	35.6	35.8	36.0
Short-circuit Current (Isc/A)	13.66	13.72	13.78	13.84	13.90
Maximum Power Current (Imp/A)	12.78	12.85	12.92	12.99	13.06
Module Efficiency (%)	20.85	21.08	21.32	21.55	21.78
Temperature Coefficient of Isc	0.05%/°C				
Temperature Coefficient of Voc	-0.31%/°C				
Temperature Coefficient of Pmax	-0.35%/°C				

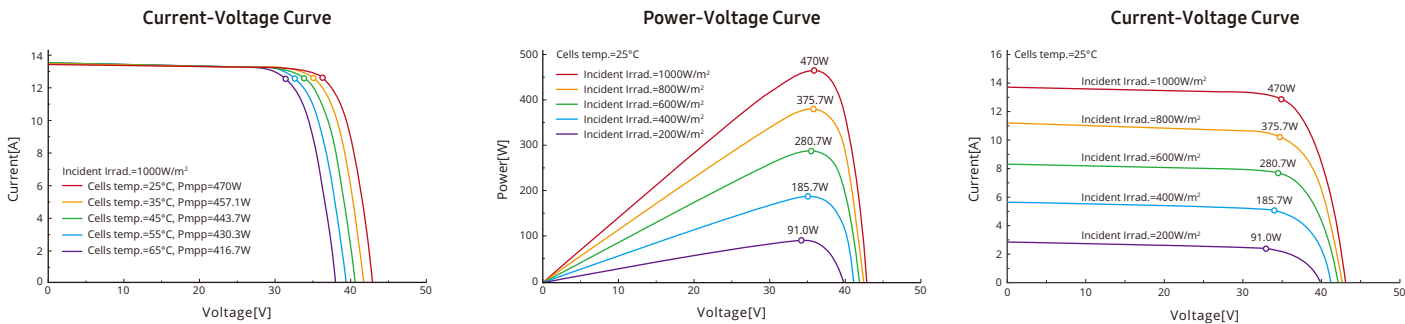
Standard Test Environment : Irradiance 1000W/m², Cell temperature 25°C, Spectrum AM1.5

NOCT-Electrical Characteristics

Maximum Power (Pmax/W)	335	339	342	349	353
Open-circuit Voltage (Voc/V)	39.0	39.2	39.4	39.9	40.1
Maximum Power Voltage (Vmp/V)	33.3	33.5	33.7	33.9	34.1
Short-circuit Current (Isc/A)	11.02	11.07	11.12	11.17	11.22
Maximum Power Current (Imp/A)	10.05	10.10	10.16	10.32	10.37

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

I-V Curve (ZECO-60X10-470W)



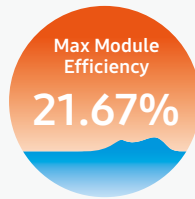
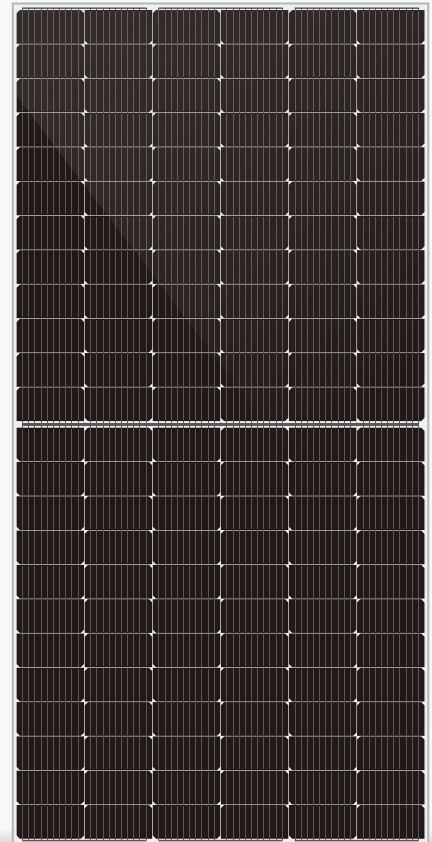


ZECO-72X10

0~+5W

525~560W

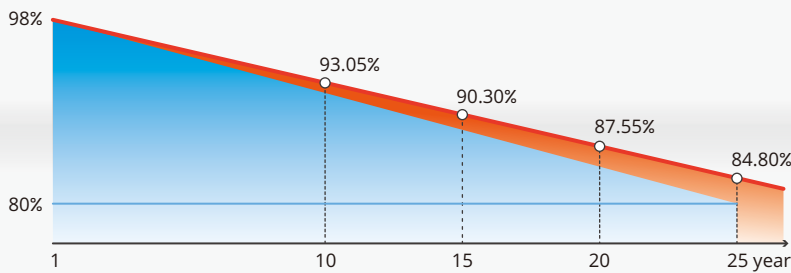
Half-Cell High Efficiency PV Module



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Comprehensive

Products and System Certificates



IEC 61215 / IEC 61730 / CE / FIDE / INMETRO

ISO 45001-

2018/International standards for occupational health & safety

ISO 14001-

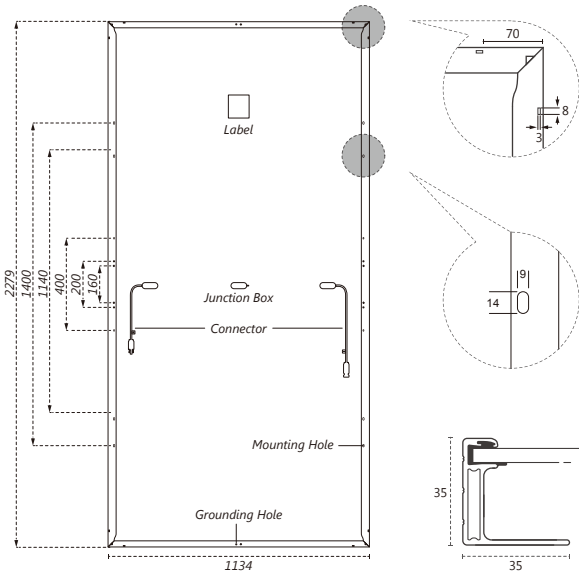
2015/Standards for environmental management system

ISO 9001-

2015/Quality management system

ZECO-72X10 525~560W

Design



Mechanical Specification

Cells Type
Mono 182×91mm

Weight
29kg

Output Cable
(Including connector)
No. of Cells
Glass
Junction box
Connector

Dimension (L×W×T)
2279×1134×35mm

Packing
31pcs/pallet, 620pcs/40HQ

4.0mm², 300/400mm in length,
length can be customized
144 (6×24)
3.2mm High Transmission, Antireflection Coating
IP68, 3 Bypass Diodes
MC4 Compatible

Operating Parameters

Maximum system voltage	1500V DC
Operating Temperature	-40 ~ +85°C
Maximum series fuse rating	25A
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-72X10							
Maximum Power (Pmax/W)	525	530	535	540	545	550	555	560
Open-circuit Voltage (Voc/V)	49.2	49.4	49.6	49.8	50.0	50.2	50.4	50.6
Maximum Power Voltage (Vmp/V)	41.4	41.6	41.8	42.0	42.2	42.4	42.6	42.8
Short-circuit Current (Isc/A)	13.48	13.54	13.60	13.66	13.72	13.78	13.84	13.90
Maximum Power Current (Imp/A)	12.68	12.74	12.80	12.86	12.91	12.97	13.03	13.08
Module Efficiency (%)	20.31	20.51	20.70	20.89	21.09	21.28	21.48	21.67
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/W)	391	394	398	402	405	409	413	417
Open-circuit Voltage (Voc/V)	46.1	46.3	46.5	46.7	46.9	47.1	47.3	47.5
Maximum Power Voltage (Vmp/V)	38.8	39.0	39.2	39.4	39.6	39.8	40.0	40.1
Short-circuit Current (Isc/A)	10.89	10.94	10.99	11.04	11.09	11.13	11.18	11.23
Maximum Power Current (Imp/A)	10.06	10.11	10.15	10.20	10.24	10.29	10.33	10.38

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

I-V Curve (ZECO-72X10-560W)

