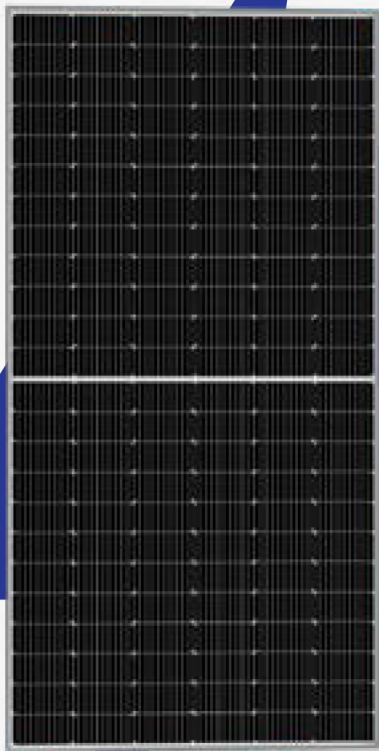


ZAP-G 12RTG-132

# TOPCon Technology Dual Glass Bifacial Module



Excellent PID resistance



Excellent LeTID resistance



Power tolerance of 0 to +4.99W



Sustain heavy snows and wind loads (5400Pa & 2400Pa)

## SUITABLE FOR



Residential



Utility



Commercial

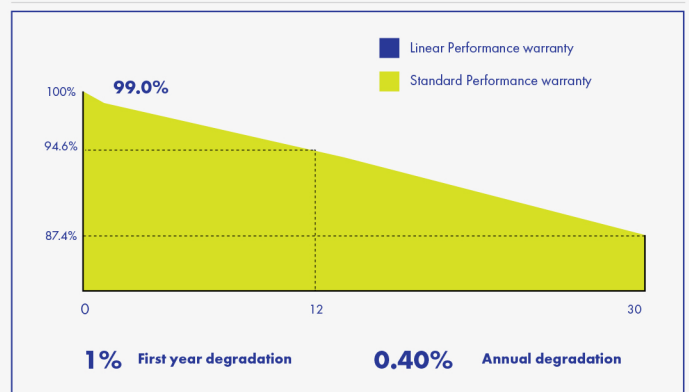


Off-grid

## CERTIFICATES \*

Product Plant

- PID: IEC TS 62804-1:2015(600-640), LeTID: IEC TS 63342:2022(620)
- BIS - IS 14286:Part1:Sec1(2023), IS/IEC 61730:PART1 (2023), IS/IEC 61730:PART2 (2023 (600-640)
- Ammonia Corrosion: IEC 62716:2013(600-640)
- Salt Mist Corrosion: IEC 61701:2020 Ed. 3.0 2020-6-11 (600-640)
- Dust and Sand: IEC 60068-2-68:1994 (600-640)
- EN ISO 9001: 2015 Quality Management System
- EN ISO 14001: 2015 Environmental Management System
- EN ISO 45001: 2018 Occupational health and safety management systems



12 YEARS  
PRODUCT WARRANTY



30 YEARS  
POWER OUTPUT WARRANTY



ANNUAL POWER DEGRADATION  
FROM 2ND YEAR



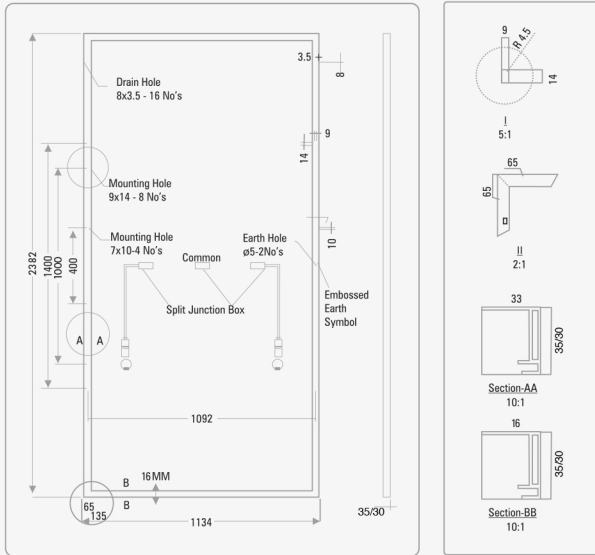
LID LOSS IN THE  
FIRST YEAR



MAXIMUM  
POWER OUTPUT



Scan to Visit  
Zap91.com



## PACKING CONFIGURATION

Container	40' HQ
Pieces per Pallet	31/36
Pallet per Container	20
Pieces per Container	620

## ZAP-G 12RTG-132

ELECTRICAL CHARACTERISTICS (STC) M2, Module Temperature 25 Deg C, AM-1.5, Irradiance 1000 W/m<sup>2</sup>

	590	595	600	605	610	615	620
Peak power, P Max(Wp)	590	595	600	605	610	615	620
Maximum voltage, Vmp(V)	40.33	40.45	40.52	40.64	40.78	40.95	41.06
Maximum Current, Imp(A)	14.63	14.71	14.81	14.89	14.96	15.02	15.1
Open Circuit Voltage, Voc(V)	47.95	48.08	48.17	48.33	48.45	48.65	48.88
Short Circuit current, Isc(A)	15.4	15.48	15.58	15.66	15.73	15.81	15.87
Module Efficiency(%)	21.84	22.03	22.21	22.40	22.58	22.77	22.95
Power Tolerance	0 to +4.99 W						
Maximum System Voltage	1500 V						
Maximum Series Fuse Rating	30 A						
Measurement Tolerance +/--3%							

Bifacial gain	590	595	600	605	610	615	620
5% Maximum Power (P max)	619.5	624.75	630	635.25	640.5	645.75	651
10% Maximum Power (P max)	649	654.5	660	665.5	671	676.5	682
20% Maximum Power (P max)	708	714	720	726	732	738	744
30% Maximum Power (P max)	767	773.5	780	786.5	793	799.5	806

NOCT	590	595	600	605	610	615	620
Maximum Power (P max)	439.10	442.82	446.54	450.26	453.98	457.70	461.42
Maximum Power Voltage (Vmp)	36.88	36.99	37.06	37.17	37.30	37.45	37.55
Maximum Power Current (Imp)	11.91	11.97	12.05	12.12	12.18	12.23	12.29
Open Circuit Voltage (Voc)	44.59	44.71	44.79	44.94	45.05	45.24	45.45
Short Circuit Current (Isc)	12.58	12.65	12.73	12.79	12.85	12.92	12.96

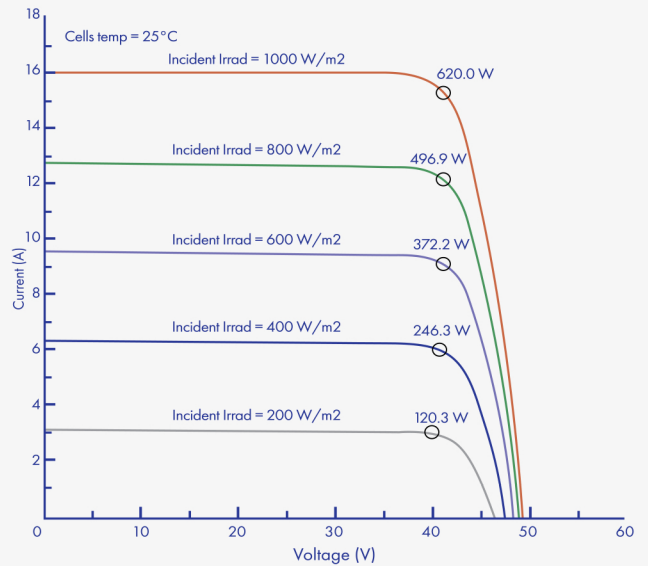
## MECHANICAL SPECIFICATIONS

External Dimensions	2382 (±2mm) X 1134 (±2mm) X 35/30 (±1 mm)
Weight	32.8 Kg
No of Cells	132-16 BB, 105 x 182.2 mm
Front Glass	2.0 mm ARC Heat Strengthened
Rear Cover	2.0 mm Heat Strengthened
Frame	Anodized Aluminium Alloy (Silver)
Junction Box	3 Split, IP 68 Rated
Connector	MC4 Compatible Connector
Output Cable	4.0 mm <sup>2</sup> / 400 mm Cable Length

## TEMPERATURE CHARACTERISTICS

Pmax Temp. Coefficient (%/°C)	-0.29
Voc Temp. Coefficient (%/°C)	-0.24
Isc Temp. Coefficient (%/°C)	0.042
Operating Temp. (°C)	-40°C to +85°C
Nominal Operating Cell Temp. (°C)	45±2°C
Bifaciality Factor	80 ± 10%

## I-V VARIATION WITH IRRADIANCE



## I-V VARIATION WITH TEMPERATURE

