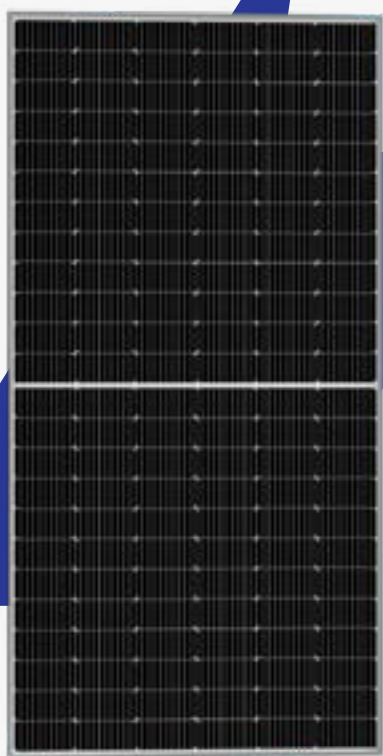


ZAP-G 12RTG.144-XXX

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

- BIS (IS 14286, IS 61730) IEC - 61215, 61730-1 & 2, 61701, 61853-1 & 2 UL 61730
- IEC - 62804, 62716
- 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



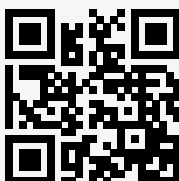
ANNUAL POWER DEGRADATION
FROM 2ND YEAR



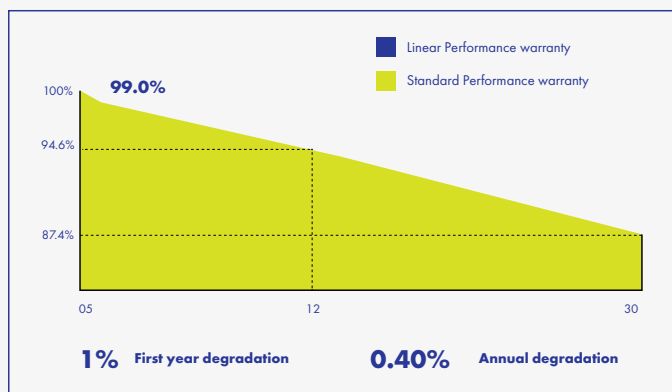
LID LOSS IN THE
FIRST YEAR

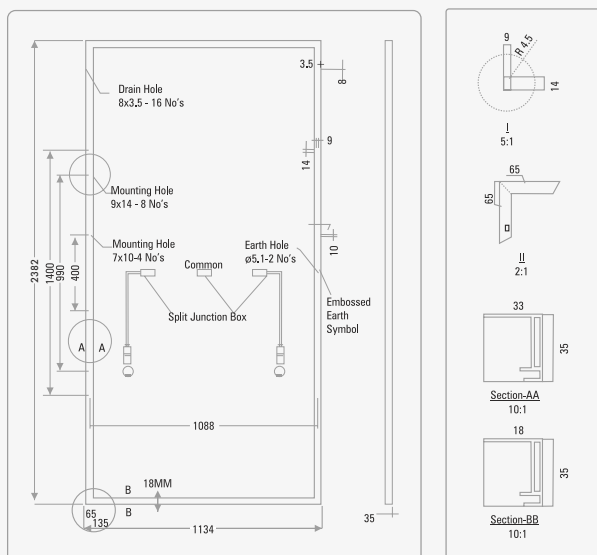


MAXIMUM
POWER OUTPUT



Scan to Visit
Zap91.com





MECHANICAL SPECIFICATIONS

External Dimensions	2382 X 1134 X (30/35)
Weight	32.8 Kg
No of Pieces	16BB, 105mm X 182.2mm
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 ² / 400 mm Cable Length

ZAP-G12R

ELECTRICAL CHARACTERSTICS (STC)	M2,Module Temperature 25 Deg C, AM-1.5, Irradiance 1000 W/m²						
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

PACKING CONFIGURATION

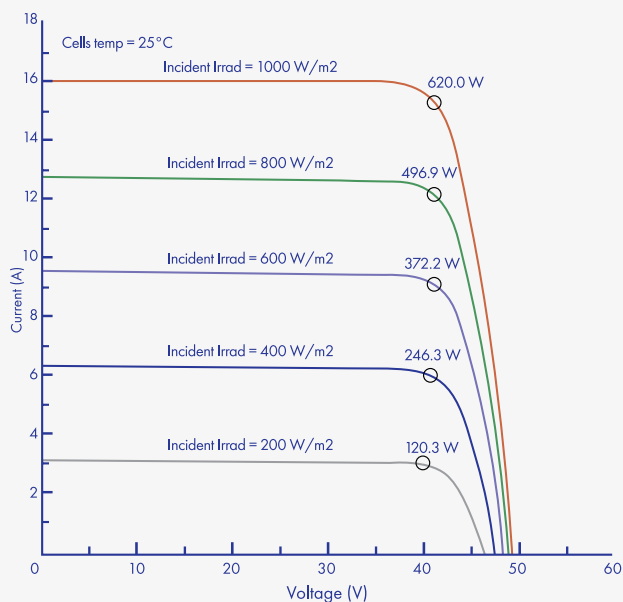
Container	40' HQ
Pieces per Pallet	31
Pallet per Container	20
Pieces per Container	620

TEMPERATURE CHARACTERISTICS

P _{max} Temp. Coefficient (%/°C)	-0.28
V _{oc} Temp. Coefficient (%/°C)	-0.23
I _{sc} Temp. Coefficient (%/°C)	0.03
Operating Temp. (°C)	-40°C to +85°C
Nominal Operating Cell Temp. (°C)	45±2°C

Bifaciality Factor	80 ± 5%
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I-V VARIATION WITH IRRADIANCE



I-V VARIATION WITH TEMPERATURE

