

# 650W

## N-Type Bifacial



Excellent temperature coefficient (Pmax):  $-0.290\%/^{\circ}\text{C}$



Excellent low-light performance: extended power generation up to 1H or more in the morning and evening



Has lower LID/LeTID attenuation



With a bifacial rate of  $80\% \pm 5\%$ , the bifacial power gain significantly reduces the LCOE as the backside is exposed to more light.



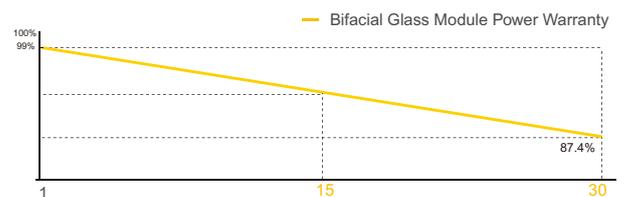
EU-28 WEEE COMPLIANT



Guarantee



Warranty



IEC61215:2021/IEC61730:2023

IEC61701/IEC62716/IEC60068/IEC62804

ISO9001:2015(Quality management systems)

ISO14001:2015(Environmental management systems)

ISO45001:2018(Occupational health and safety )

ISO14067:2018/PAS2050:2011

**SPECIFICATION (STC)** Irradiance at 1000 W/m<sup>2</sup>, Cell Temp 25°C, Air Mass AM1.5

MODEL TYPE	ODA630-33V-MHDRz	ODA635-33V-MHDRz	ODA640-33V-MHDRz	ODA645-33V-MHDRz	ODA650-33V-MHDRz
Rated Peak Power-Pmax(Wp)	630.00	635.00	640.00	645.00	650.00
Maximum Power Voltage-Vmp(V)	41.55	41.59	41.63	41.68	41.72
Maximum Power Current-Imp(A)	15.16	15.27	15.37	15.47	15.58
Open Circuit Voltage-Voc(V)	48.88±3%	48.93±3%	48.98±3%	49.03±3%	49.08±3%
Short Circuit Current-Isc(A)	16.11±3%	16.22±3%	16.33±3%	16.44±3%	16.55±3%
Module Efficiency(%)	23.32	23.51	23.69	23.87	24.06

**ELECTRICAL DATA(BNPI)** Irradiance at 1000 W/m<sup>2</sup>, Back irradiance 135 W/m<sup>2</sup>, Cell Temp 25°C, Air Mass AM1.5

Rated Peak Power-Pmax(Wp)	698.00	704.00	709.00	715.00	720.00
Maximum Power Voltage-Vmp(V)	41.67	41.72	41.76	41.80	41.84
Maximum Power Current-Imp(A)	16.75	16.87	16.98	17.10	17.21
Open Circuit Voltage-Voc(V)	49.03±3%	49.08±3%	49.13±3%	49.18±3%	49.23±3%
Short Circuit Current-Isc(A)	17.80±3%	17.92±3%	18.04±3%	18.17±3%	18.29±3%

**MECHANICAL CHARACTERISTICS**

Cell Type (mm)	182*105 N-Type Mono
No. Of Cells	132(12*11)
Module Dimensions(mm)	2382*1134*30
Weight	32.40 kg
Bifacial Glass Front Glass(mm)	2.0mm AR Coating Tempered Glass
Bifacial Glass Back Glass(mm)	2.0mm Glazed Glass
Frame	Anodized Aluminium Alloy(Silver)
Junction Box	IP68,1500VDC, 3 Schottky Bypass Diodes
Cables	4.0mm <sup>2</sup> , Positive(+)300mm, Negative(-)300mm, Or Customized Length
Connector	IP68
Snow Load/Wind Load	5400Pa/2400Pa
Class Of Safety Protection	Class II
IEC Component Fire Rating	Class A

**OPERATING PARAMETERS**

Maximum System Voltage	1500V
Operational Temp	-40~+85 °C
Max Series Fuse Rating	28A
Nominal Module Operating Temp (NMOT)	45±2°C

**TEMP COEFFICIENT**

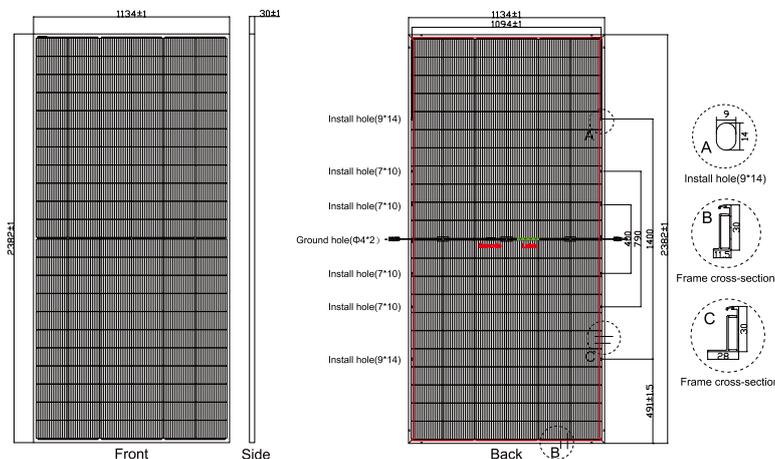
Temp Coefficient Of Pmax	-0.290%/°C
Temp Coefficient Of Voc	-0.250%/°C
Temp Coefficient Of Isc	+0.045%/°C

**PACKING STANDARD 40ft (HQ)**

Number Of Modules Per Pallet	37
Number Of Pallets Per Container	20
Number Of Modules Per Container	740

**ASSEMBLY DRAWING**

Unit:mm



**IV CURVE (650W)**

