

# VX144MP 545W~555W

## Monofacial PV Module

## Bringing The Energy of The Sun

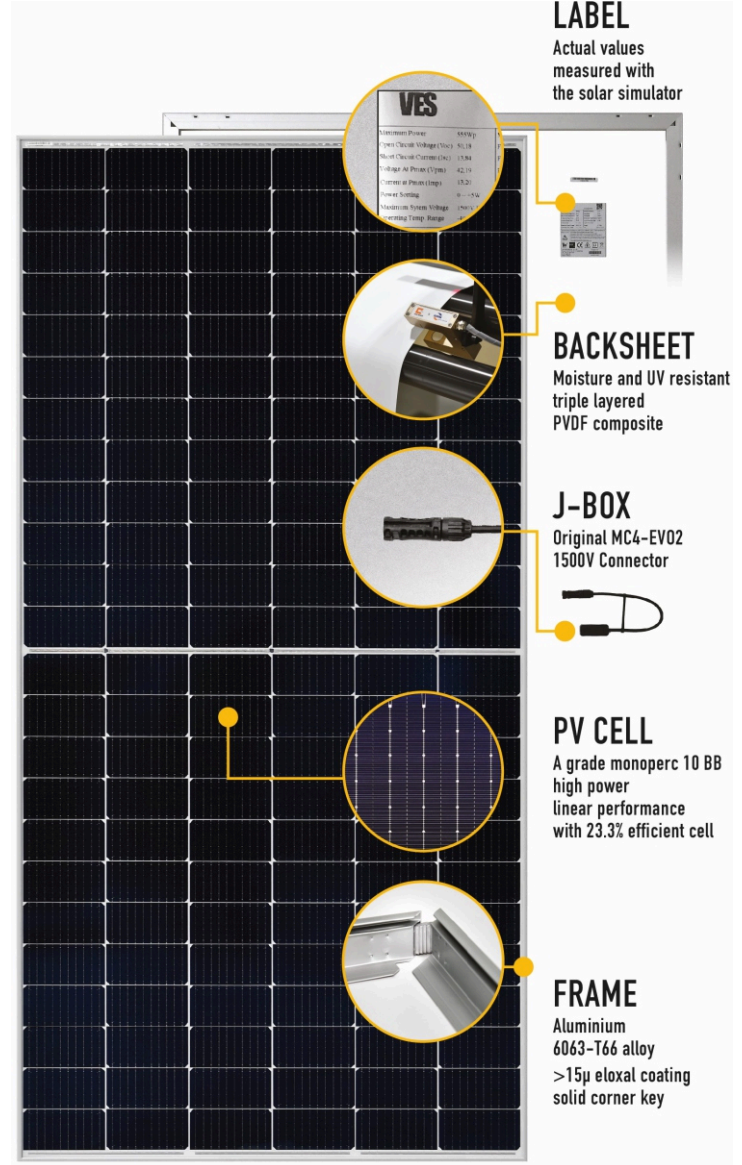
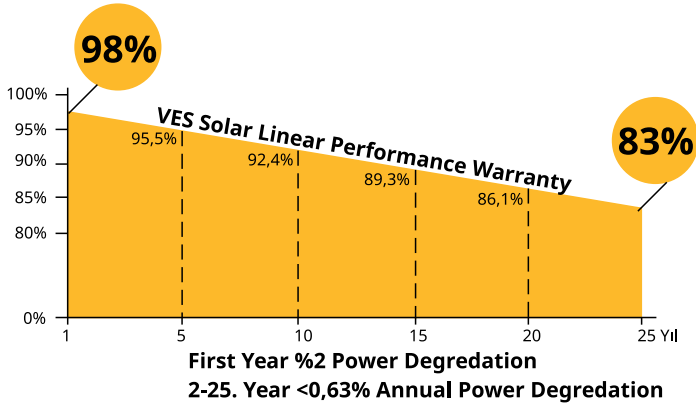
- Label information based on each module's own I/V test results
- Incoming quality control tests applied to raw materials
- Electroluminescence (EL) tests applied at three points on the line
- Hi-pot, insulation and grounding tests applied to each panel
- Periodically performed gel content, EVA/PV cell peel and safety tests
- Visual inspections conducted post-lamination and before shipment
- Climate-controlled production area, curing tunnel, and storage
- Dust-free and anti-static production environment
- Real-time traceability and reporting for component and module
- Fully automated line for hands-free production and packaging



**PRODUCT  
WARRANTY**



**PERFORMANCE  
WARRANTY**



### Product Certificates

IEC 61215-1:2021	Design qualification - Test requirements
IEC 61215-1-1:2021	Special requirements for crystalline silicon PV modules
IEC 61215-2:2021	Test procedures
IEC 61730-1:2018	PV module safety - Requirements for construction
IEC 61730-2:2018	PV module safety - Requirements for testing
IEC 61701:2020	Salt mist corrosion testing
IEC 62716:2013	Ammonia corrosion testing
IEC 62804-1-1:2020	Test methods for the detection of P.I.D

### System Certificates

ISO 9001:2015	Quality Management System
ISO 45001:2018	Occupational H&S Management System
ISO 14001:2015	Environmental Management System



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VESTÜST02-EN

Rev.No/Tar: 01/ 20.03.2024

# VX144MP 545W~555W

**21,48%**  
Module Efficiency

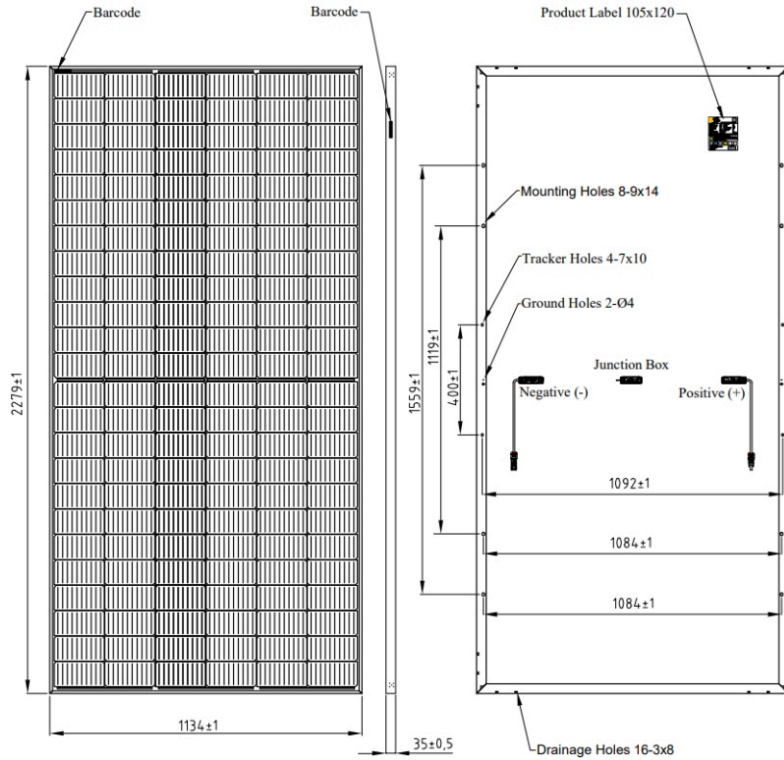
**0~+5W**  
Positive Tolerance

**MonoPERC**  
PV Cell Technology

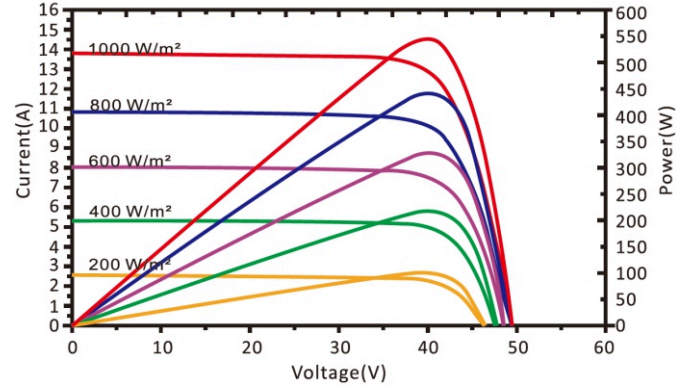
**10BB - M10**  
PV Cell Type

**Halfcut**  
144 Half Cells

## Module Dimensions



## I/V & Power Curves



## Mechanical Properties

Cell Type	144 / 182 x 91 mm
Junction Box	IP68 rated- 3 diodes
Output Cables	4 mm <sup>2</sup> / 350 mm vertical / 1300 mm horizontal
Connectors	Original MC4-EVO2
Glass	3,2 mm AR coated tempered glass
Frame	15 µ Eloxal coated 6063-T66 aluminium alloy
Encapsulant	EVA
Backsheet	Triple layered PVDF composite
Weight	27,5 kg
Dimensions	2279 x 1134 x 35 mm

## Electrical Properties

Module Type	VX144MP - 545W		VX144MP - 550W		VX144MP - 555W	
	STC	NOCT	STC	NOCT	STC	NOCT
Test Condition	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power - Pmax (W)	545	409	550	413	555	417
Open Circuit Voltage - Voc (V)	49,95	46,66	50,08	46,81	50,15	46,87
Short Circuit Current - Isc (A)	13,67	11,01	13,79	11,01	13,84	11,14
Maximum Power Voltage - Vmp (V)	41,91	38,80	41,92	38,74	42,09	38,90
Maximum Power Current - Imp (A)	12,99	10,52	13,13	10,63	13,19	10,68
Module Efficiency (%)	21,06		21,29		21,48	

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25 C°, AM: 1,5  
Measurement Tolerance: ± 3%

NOCT: Irradiance 800 W/m<sup>2</sup>, Ambient Temperature 20 C°, AM: 1,5 Wind Speed: 1 m/s

## Temperature Characteristics (STC)

Operating Temperature	-40 C°~+85 C°
Temperature Coefficient of Isc	+0,0375 %/C°
Temperature Coefficient of Voc	-0,253 %/C°
Temperature Coefficient of Pmax	-0,331 %/C°
Nominal Cell Operating Temperature (NOCT)	45 ± 2 C°

## Packaging

Packaging	31 modules per pallet / 20 pallets per 40'HC / 5 pallets per 20'GP
Package Size and Weight	WxLxH: 1135 x 2330 x 1300 mm / Gross 930 kg

## Operational Characteristics

Power Tolerance	0~+5 W
Maximum System Voltage	DC 1500 V (IEC)
Maximum Series Fuse Rating	20 A
Application Class	Class II
Fire Rating	IEC Class C
Front Side Maximum Test Load	Snow load rating 5400 Pa
Rear Side Maximum Test Load	Wind load rating 2400 Pa
Hail Test	Ice ball velocity 23 m/s, size: 25 mm
Salt Mist Test	Severity (5)