

MEP555-P144-GG



MonoPERC-144cell-M10 Dual Glass

0~+5W

Positive Power Tolerance

21.5%

Maximum Efficiency

530-555W

High Conversion Efficiency

High solar panel efficiency to guarantee high power output

Better Weak Light Performance

Higher power output even under low-light environment like on cloudy or foggy days

More Weather Resistance

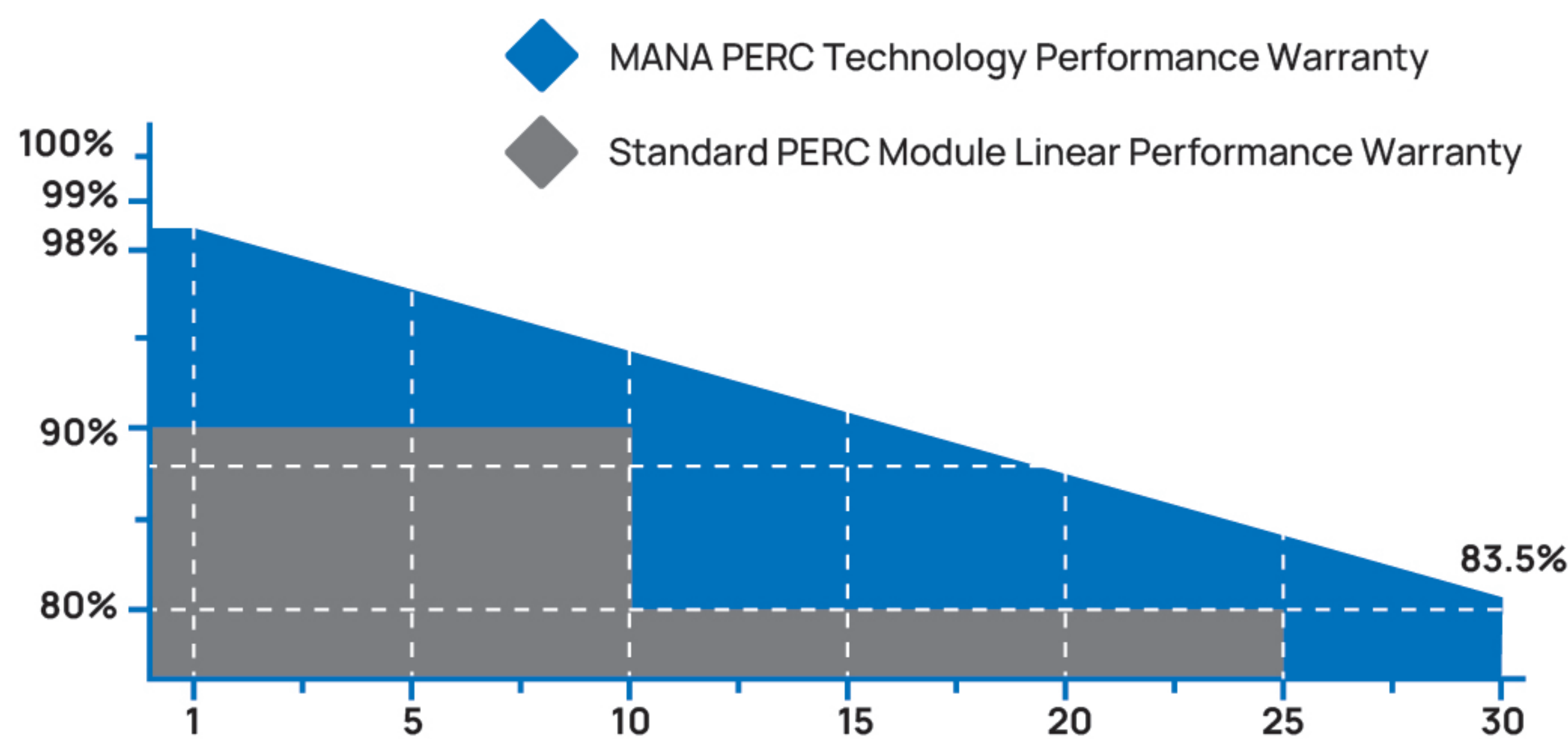
Resistant to harsh environment such as salt, ammonia, sand, high temperature and high humidity area

Lower LCOE

Up to 25% more power generation in bifacial type (depending on Albedo)

Lower Temperature Coefficient

Better performance of the solar panel in higher temperature environment or hot days



Mana Energy's Certificates

TUV Certificate IEC 61215: 2021
TUV Certificate IEC 61730: 2016
TUV Certificate IEC 61730: 2023
CE Certification (EN 61730:2018)
UKCA Certification (EN 61730:2018)
CEBEC Certification (IEC 61215: 2021 / IEC 61730: 2023)
ISO 9001:2015: Quality management system
ISO 14001:2015: Environmental management system
ISO 45001:2018: Occupational health and safety management system



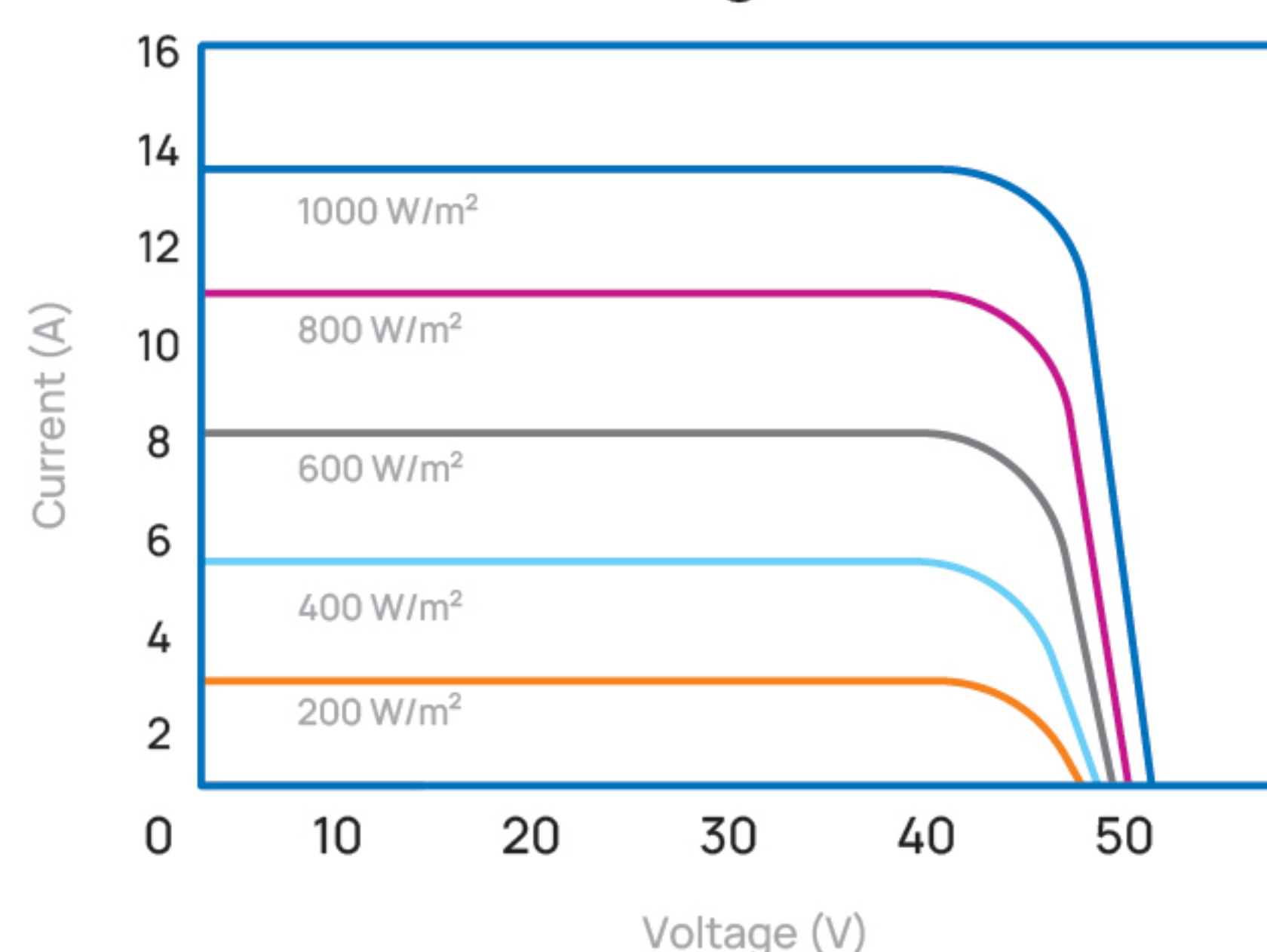
30
YEARS

Performance
Warranty

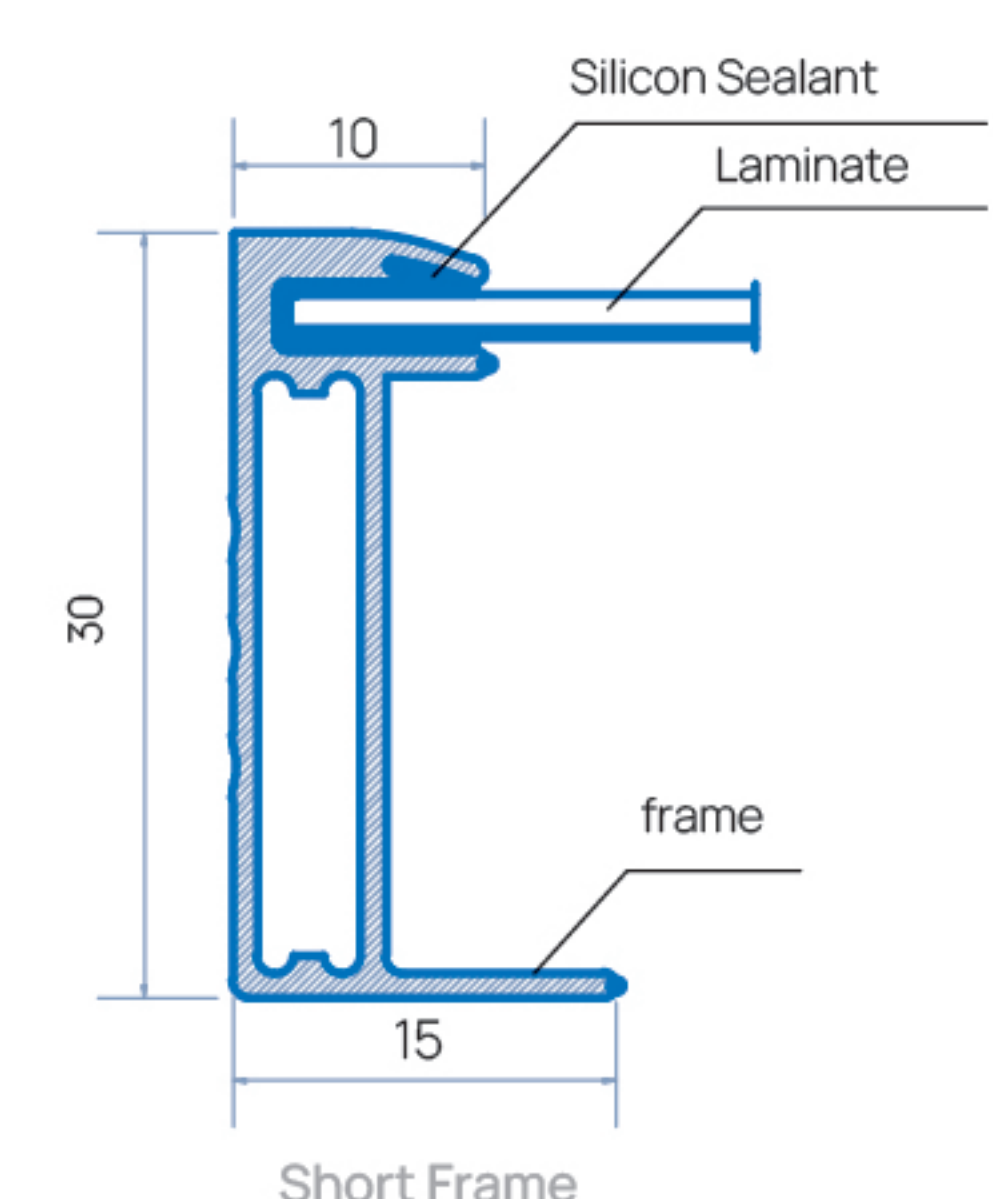
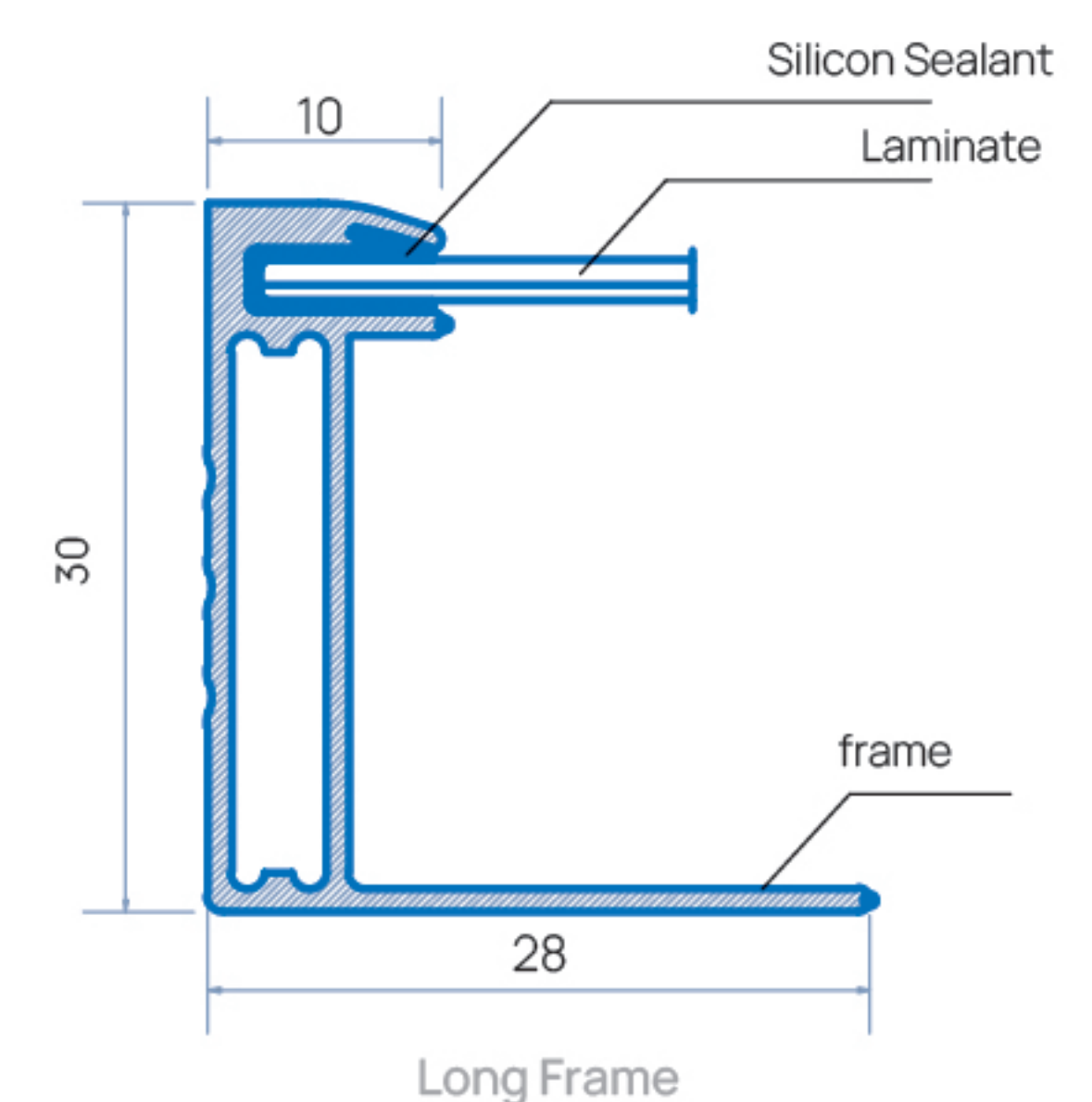
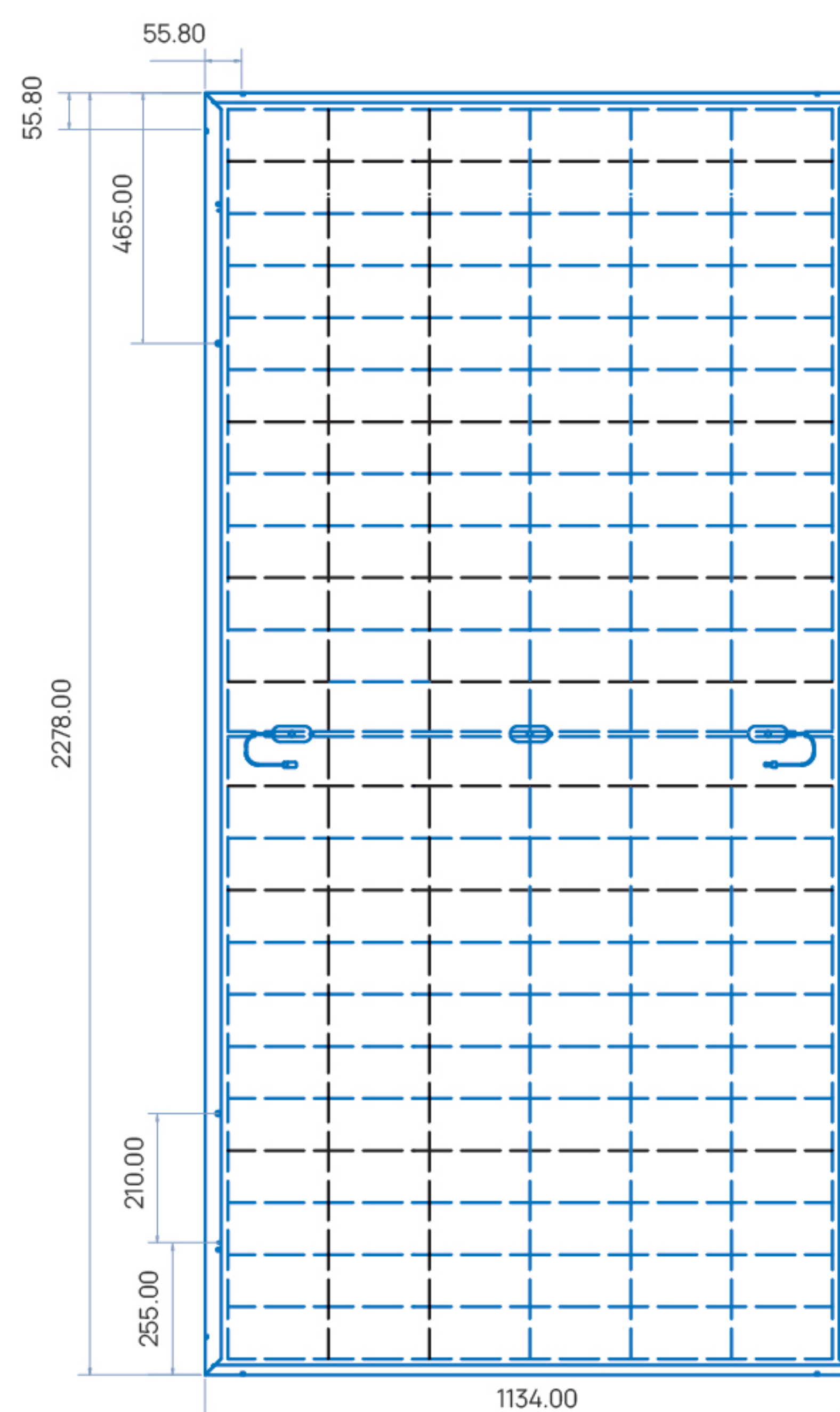
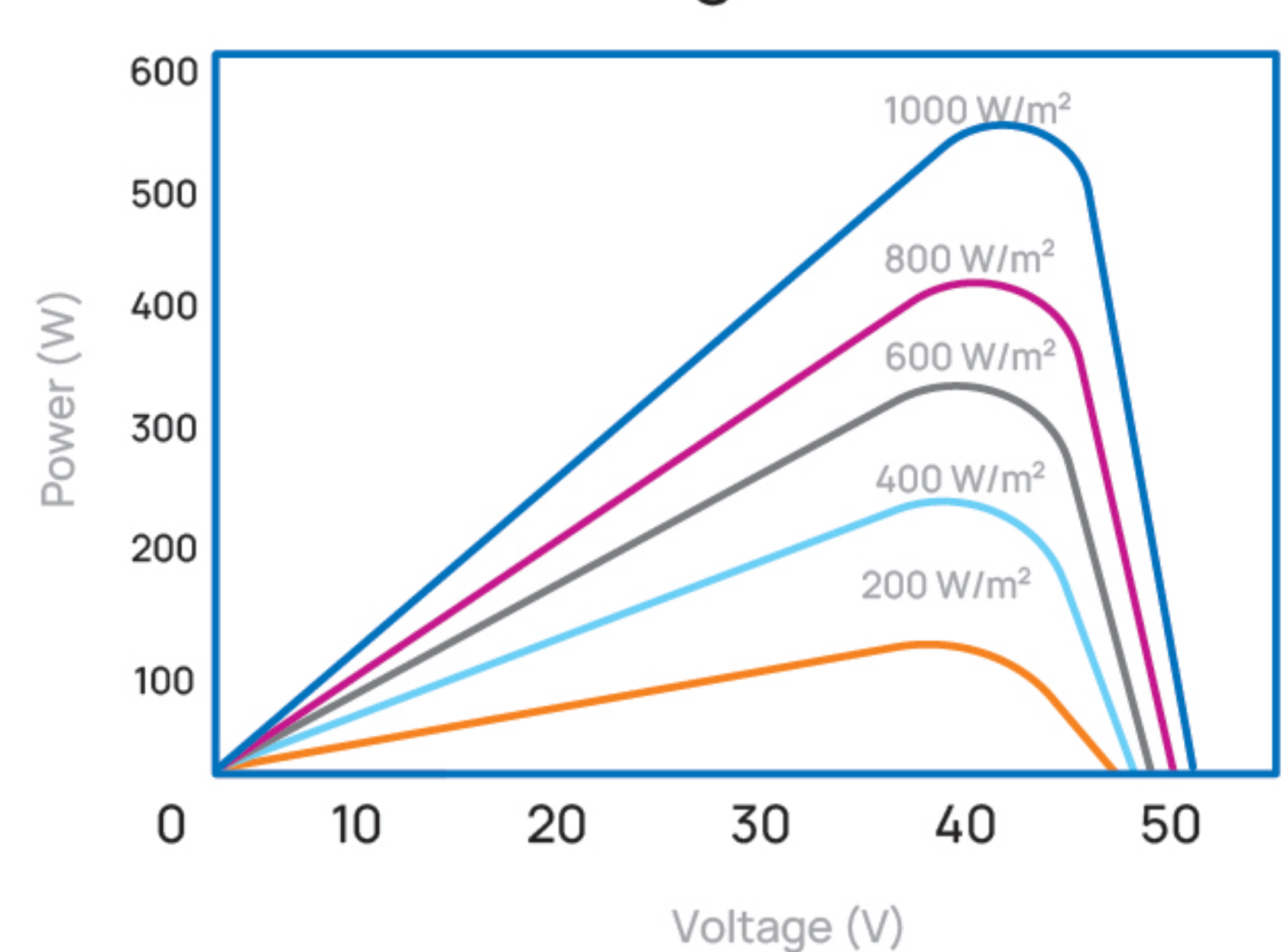
12
YEARS

Product
Warranty

Current-Voltage Curve **555W**



Power-Voltage Curve **555W**



Caution

To operate, install and manage Mana Energy Modules, read the installation manual and use carefully.

Observation

This datasheet is subject to change without notice due to continuous improvement of our products. You can find all records of the updates on our website www.manaenergypak.com or by contacting one of our sales staff. Allrights reserved @Mana Energy.



MEP555-P144-GG

Electrical Specificatuin (STC) - Front Side			STC: AM1.5 1000W/m² 25°C [Test Uncertainty: ±3%]					
Model			MEP555-P144-GG 530	MEP555-P144-GG 535	MEP555-P144-GG 540	MEP555-P144-GG 545	MEP555-P144-GG 550	MEP555-P144-GG 555
Max Power	Pmp	[W]	530	535	540	545	550	555
Max Power Voltage	Vmp	[V]	41.90	42.02	42.14	42.26	42.38	42.50
Max Power Current	Imp	[A]	12.66	12.74	12.82	12.91	12.98	13.07
Open Circuit Voltage	Voc	[V]	50.95	51.06	51.17	51.28	51.39	51.50
Short Circuit Current	Isc	[A]	13.43	13.50	13.58	13.64	13.71	13.80
Efficiency		[%]	20.5	20.7	20.9	21.1	21.3	21.5

Electrical Specificatuin (NMOT) - Front Side			NMOT: 800W/m² 20°C 1m/s [Test Uncertainty: ±3%]					
Max Power	Pmp	[W]	397	401	404	408	412	416
Max Power Voltage	Vmp	[V]	39.05	39.18	39.30	39.46	39.62	39.81
Max Power Current	Imp	[A]	10.17	10.23	10.30	10.36	10.40	10.46
Open Circuit Voltage	Voc	[V]	48.09	48.17	48.22	48.33	48.47	48.55
Short Circuit Current	Isc	[A]	10.75	10.80	10.87	10.92	10.98	11.05

Bifaciality Power Generation Gain (Regarding 550W as an example)								
Power Gain		[%]	0	5	10	15	20	25
Max Power	Pmp	[W]	550	578	605	633	660	688
Max Power Voltage	Vmp	[V]	42.38	42.41	42.44	42.47	42.50	42.53
Max Power Current	Imp	[A]	12.98	13.62	14.26	14.89	15.53	16.17
Open Circuit Voltage	Voc	[V]	51.39	51.42	51.45	51.48	51.51	51.54
Short Circuit Current	Isc	[A]	13.71	14.51	15.19	15.89	16.66	17.32

Mechanical Data	
Solar Cell	P-Type 182mm × 91mm - [12×12]
Module Dimension	2278×1134×30 mm
Weight	32kg
Front Cover	Glass - 2mm SEMI Tempered AR coated
Back Cover	Glass - 2mm SEMI Tempered
Frame	Silver - Anodized Aluminium Alloy
Junction Box	IP68 Rated - 3 Bypass Diodes
Cable	4mm² - 300mm

Temperature Ratings				
Temperature Coefficient	Isc	α	[%/°C]	+0.05
Temperature Coefficient	Voc	β	[%/°C]	-0.27
Temperature Coefficient	Pmax	γ	[%/°C]	-0.35
Nominal Module Operating Temperature	NMOT		[°C]	44±2

Operating Properties	
Max System Voltage	1500V
Max System Fuse Rating	30 A
Operational Temperature	-40 to +85 °C
BifacialityTolerance	±5%
Bifaciality=Pmaxrear/Pmaxfront (STC)	70%

Packaging Information	
# Module Per Pallet	35
# Pallet per 45'HC Container	22
# Pallet per 40'HC Container	20
# PCs per Container 40'HC	700
Pallet Weight (kg)	1145