

ECO DELTA High Efficiency 9BB Monocrystalline PV Module

ECO-310-320/M-60(9BB)



Higher Module Efficiency

Brings 0-+3W positive tolerance on label rating power provides higher Kwh



INNOVATIONAL 9-BUSBAR CELLS

Reduces the cell series resistance and internal stress, decreases the risk of micro-crack and improves the module output.



INNOVATIVE PERC CELL TECHNOLOGY

Excellent cell efficiency and output.



REDUCE SHADOW LOSS

Effectively reduces the effect of shadow on the module surface.



REDUCE INTERNAL MISMATCH LOSS

Reduces mismatch loss and improves output.



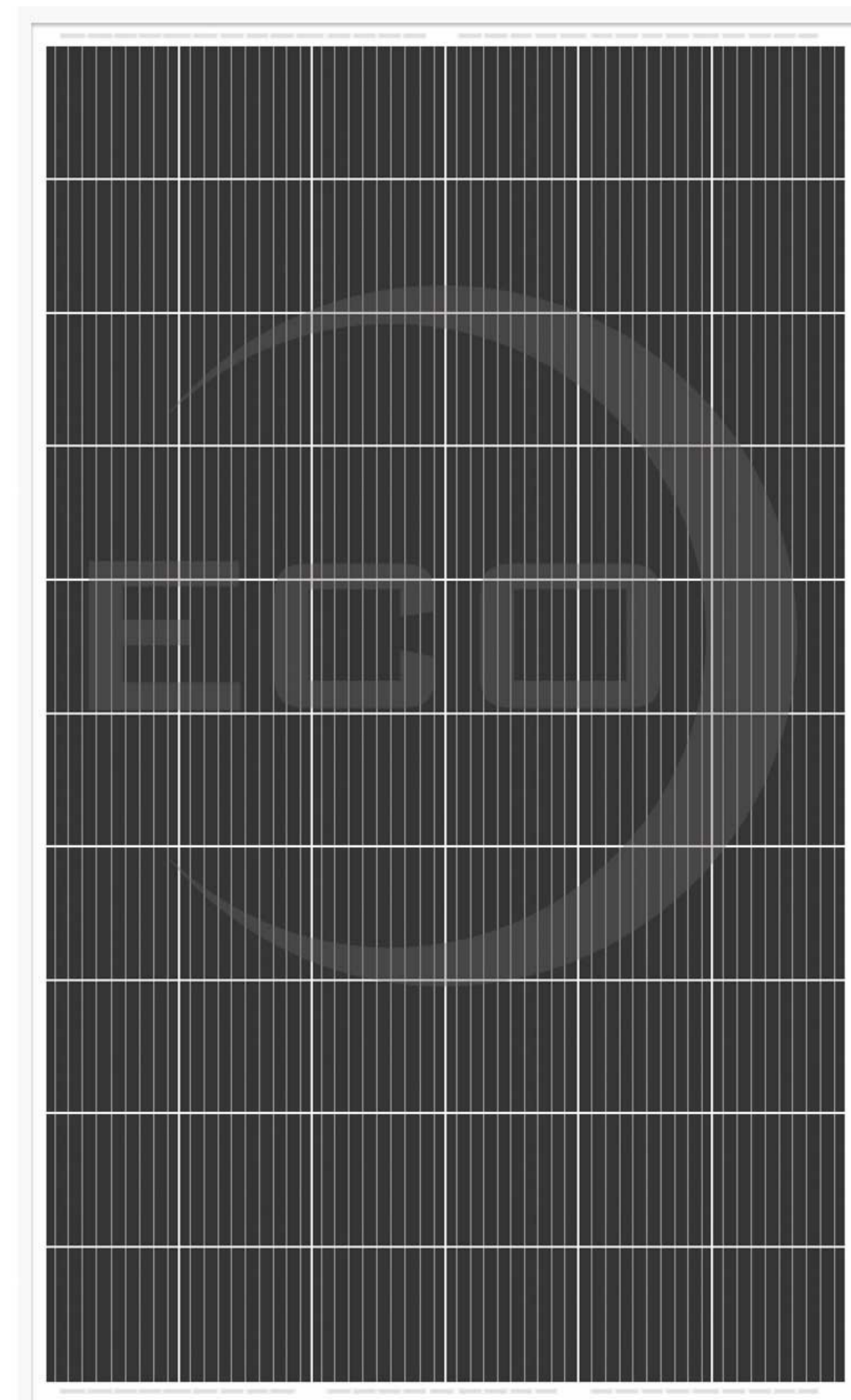
PASSED HAIL TEST

Certified to hail resistance: ice ball size (d=45mm) and ice ball velocity (v=30.7m/s).

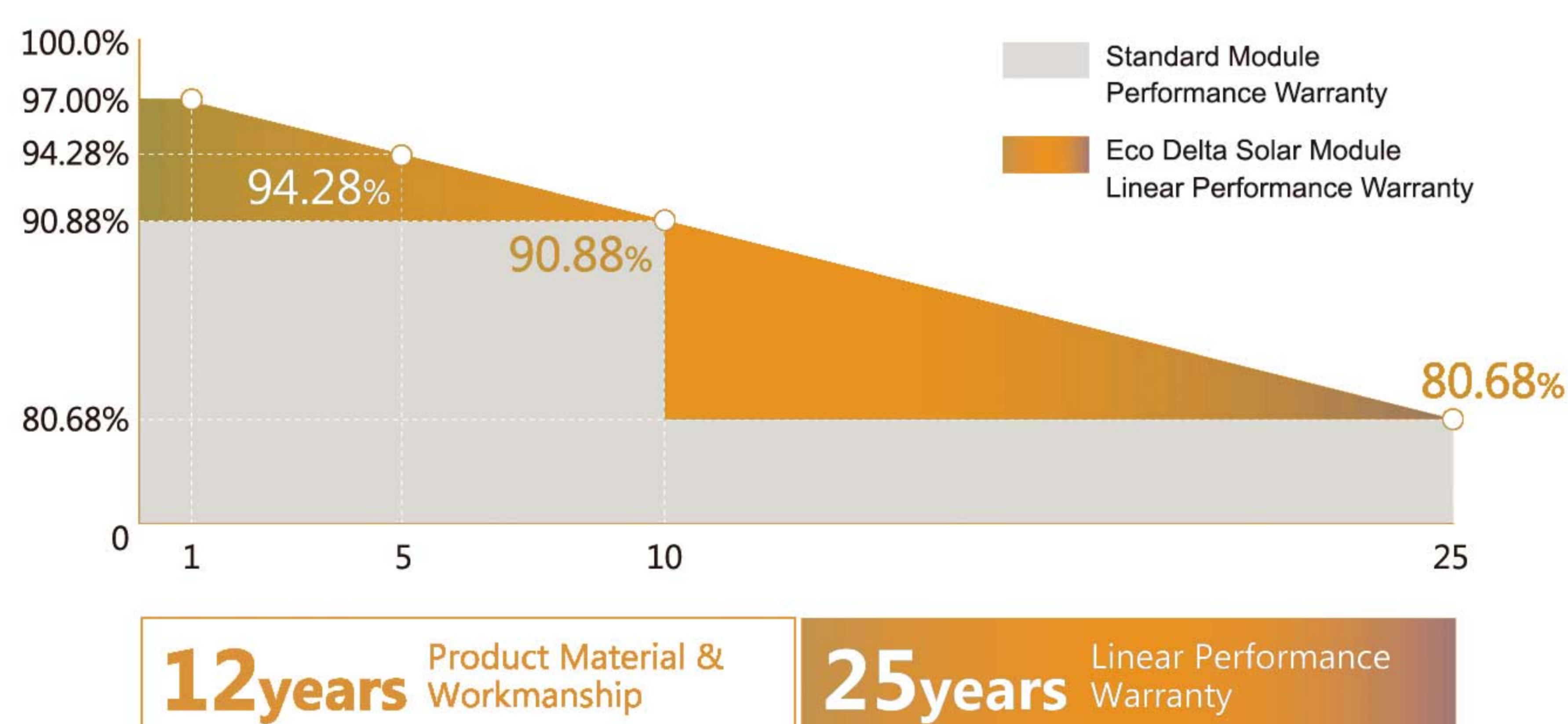


PID RESISTANCE

Excellent PID resistance at 96 hours (@85°C/85%) test, and also can be improved to meet higher standards for the particularly harsh environment



LINEAR PERFORMANCE WARRANTY



QUALITY WARRANTY

Eco Delta guarantees that defects will not appear in materials and workmanship defined by IEC61215 or IEC61730 under normal installation, use and maintenance as specified in Eco Delta's installation manual for 12 years from the warranty starting date.

ISO9001
ISO14001
OHSAS18001



About Eco Delta

Eco Delta Power Co.,Ltd specializes in research, development, production, and sales of solar PV products as well as provision of related services and provides customers around the world with high-quality PV products.

www.ecodeltapower.com

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ELECTRICAL DATA @ STC		ECO-310/M-60(9BB)	ECO-315/M-60(9BB)	ECO-320/M-60(9BB)
Peak Power(Pmax)	(W)	310	315	320
Maximum Power Voltage (Vmp)	(V)	33.30	33.50	33.70
Maximum Power Current(Imp)	(A)	9.32	9.40	9.49
Open-circuit Voltage (Voc)	(V)	40.45	40.26	40.70
Short-circuit Current(Isc)	(A)	9.91	9.94	9.99
Module Efficiency	(%)	18.90	19.20	19.55
Operating Temperature		-40°C~+85°C		
Maximum System Voltage		□1000V □1500V		
Maximum Series Fuse Rating		15A		
Power Telorance		0~+3%		

*STC (Standard Test Condition): Irradiance 1000W/ m² , Module Temperature 25°C, AM 1.5

ELECTRICAL DATA @ NMOT		ECO-310/M-60(9BB)	ECO-315/M-60(9BB)	ECO-320/M-60(9BB)
Peak Power(Pmax)	(W)	232	235	238
MPP Voltage (Vmp)	(V)	31.10	31.29	31.48
MPP Current(Imp)	(A)	7.46	7.52	7.59
Open Circuit Voltage (Voc)	(V)	37.54	37.70	37.77
Short Circuit Current(Isc)	(A)	7.90	7.92	7.96

*Under Nominal Module Operating Temperature (NMOT), Irradiance of 800W/ m² , Spectrum AM 1.5, Ambient Temperature 20°C, Wind Speed 1m/s

TEMPERATURE CHARACTERISTICS		
Temperature coefficient of Pmax		-0.38%
Temperature coefficient of Voc		-0.31%
Temperature coefficient of Isc		0.05%
NMOT		41±3°C

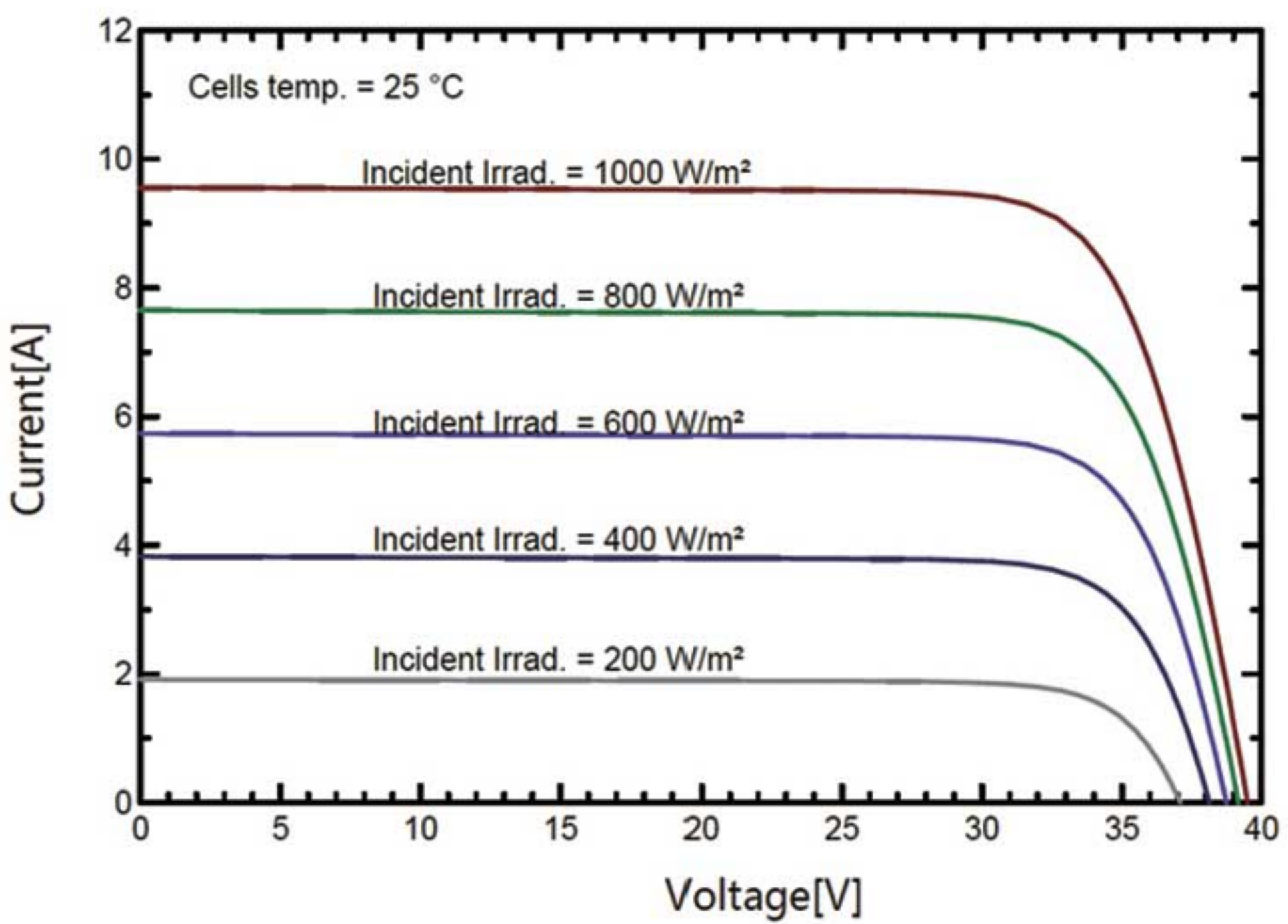
MECHANICAL DATA		
Cell Type		Mono-Crystalline, 156.75*156.75mm
Cell Arrangement		60
Dimension (L*W*H)		1650*992*35mm
Weight		18.0kg
Front Cover		3.2mm Tempered Glass
Frame		Anodized Aluminium Alloy
Junction Box		IP67, 3 Bypass Diodes
Cable Type		4mm²
Length of Cable		1000mm
Connector		PV Connector

OPTIONAL		
Frame		□Black
Backsheet		□Black
Connector		□Original MC4
Cable		□Customized
Module Size		□Customized

PACKING MANNER		
Packing Type		40'HQ
Piece/Pallet		30
Piece/Container		840

*The specification and key features described in this datasheet may deviate slightly and are not guaranteed. Due to ongoing innovation, R&D enhancement, ECO DELTA POWER CO., LTD Reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures

