

ECO DELTA MBB Mono Half-Cut 210 Cell PV Module

ECO-640-660M-66UHC



INNOVATIONAL HALF-CUT CELL TECHNOLOGY

Large area cells based on 210mm silicon wafers and 1/2-cut cell technology



OPTIMIZED BUSBAR NUMBER

New circuit design
Lower internal current, lower internal loss



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.



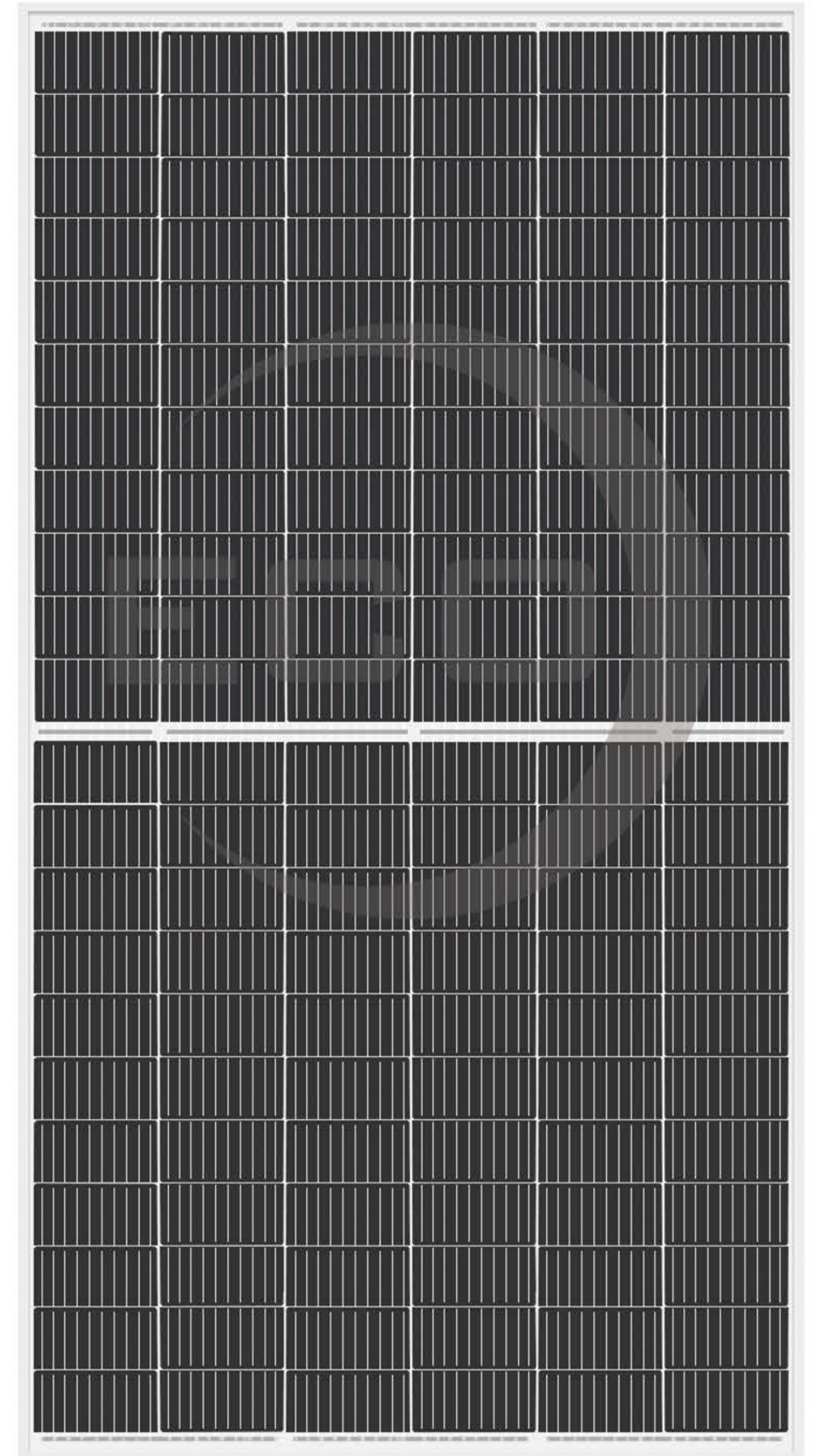
PASSED HAIL TEST

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-640M-66 UHC	ECO-645M-66 UHC	ECO-650M-66 UHC	ECO655M-66 UHC	ECO-660M-66 UHC
Peak Power(Pmax)	(W)	640	645	650	655	660
Maximum Power Voltage (Vmp)	(V)	37.34	37.52	37.72	37.91	38.08
Maximum Power Current(Imp)	(A)	17.14	17.19	17.23	17.28	17.33
Open-circuit Voltage (Voc)	(V)	45.30	45.50	45.68	45.87	46.03
Short-circuit Current(Isc)	(A)	18.53	18.58	18.63	18.68	18.73
Module Efficiency	(%)	20.37	20.53	20.70	20.85	21.01
Operating Temperature		-40°C~+85°C				
Maximum System Voltage		□1500V				
Maximum Series Fuse Rating		30A				
Power Tolerance		0~+3%				

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

ELECTRICAL DATA @ NMOT		ECO-640M-66 UHC	ECO-645M-66 UHC	ECO-650M-66 UHC	ECO-655M-66 UHC	ECO-660M-66 UHC
Peak Power(Pmax)	(W)	492	496	500	503	507
MPP Voltage (Vmp)	(V)	34.04	34.20	34.39	34.55	34.71
MPP Current(Imp)	(A)	14.45	14.49	14.52	14.56	14.61
Open Circuit Voltage (Voc)	(V)	41.82	42.00	42.18	42.35	42.50
Short Circuit Current(Isc)	(A)	15.75	15.80	15.84	15.88	15.92

*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	-0.34%/k
Temperature coefficient of Voc	-0.25%/k
Temperature coefficient of Isc	0.04%/k
NMOT	45±2°C

MECHANICAL DATA

Cell Type	Mono-Crystalline, 210*105mm
Cell Arrangement	132pcs (2(6*11))
Dimension (L*W*H)	2411 x 1303 x 35mm
Weight	33kg
Front Cover	3.2mm Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable Type	4mm ²
Length of Cable	1400mm
Connector	Compatible with MC4 PV Connector

OPTIONAL

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

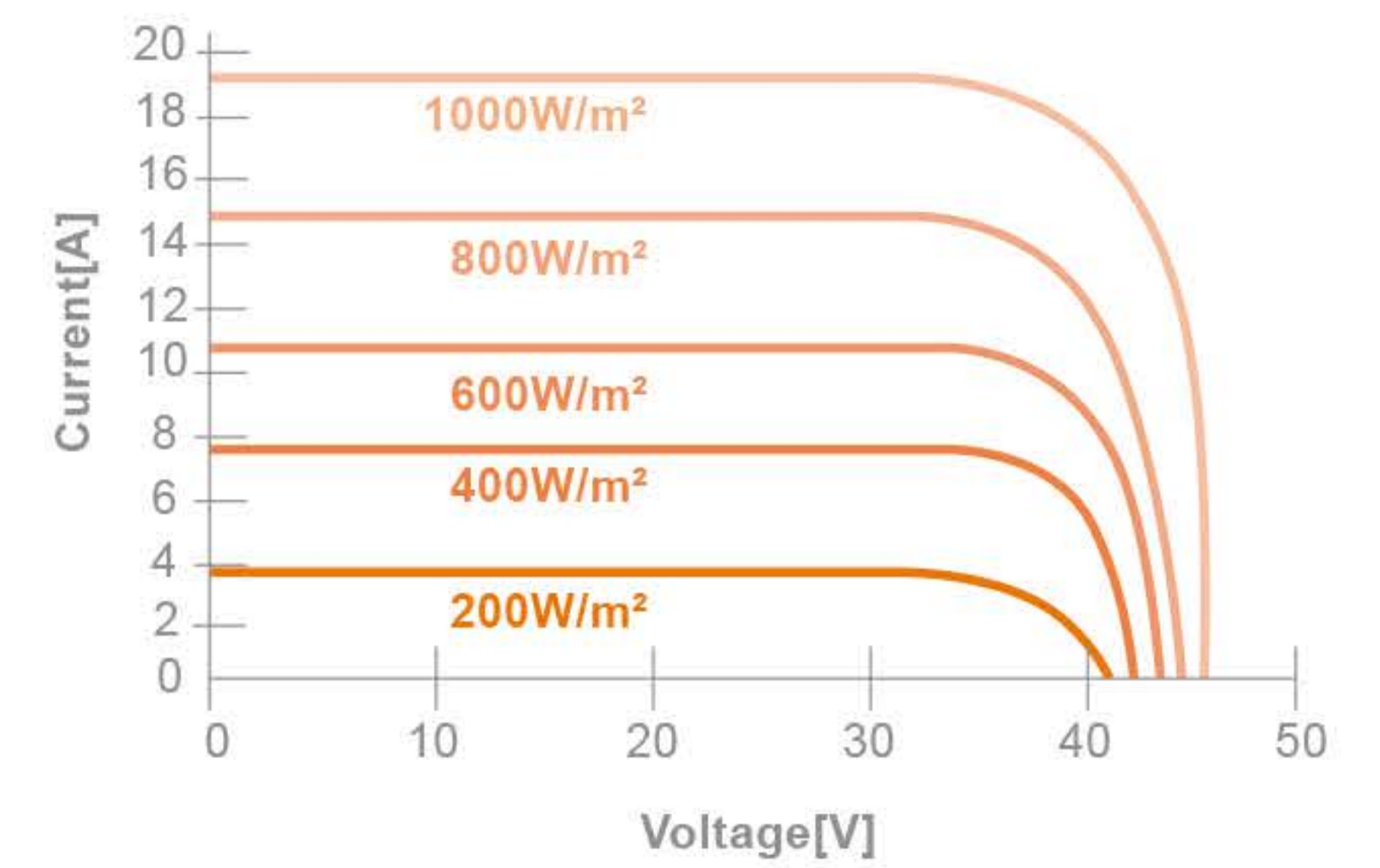
PACKING MANNER

Packing Type	40'HQ
Piece/Pallet	31
Piece/Container	558

*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

Cell Temperature: 25°C



Current-Voltage Curve under different working temperatures

AM1.5 1000W/m²

