

CLASSIC PLUS™



ECO-440-450M-54LHC-DGBF black (TOPCON)

BIFACIAL
SOLAR MODULE

Infinitely close to 2 m²

1.99 m²



30 YEARS
PRODUCT MATERIAL &
WORKMANSHIP
30 YEARS 87.4%
LINEAR PERFORMANCE
WARRANTY

INNOVATIONAL
SMBB AND
HALF-CUT CELLS
TECHNOLOGY

REDUCE
INTERNAL LOSS
REDUCE
SHADOW LOSS

N TYPE
TOPCON CELL
TECHNOLOGY
EXCELLENT CELL
EFFICIENCY AND OUTPUT

PASSED THREE
TIMES IEC
STANDARD TEST

ADVANCED
BIFACIAL
EFFICIENCY

ECO DELTA Mono TOPCON Half-cut Cell

Double-glass-bifacial PV Module

ECO-440-450M-54LHC-DGBF black(TOPCON)



ELECTRICAL DATA @ STC		ECO-440M-54 LHC-DGBF black	ECO-445M-54 LHC-DGBF black	ECO-450M-54 LHC-DGBF black
Peak Power(Pmax)	(W)	440	445	450
Maximum Power Voltage (Vmp)	(V)	32.67	32.87	33.07
Maximum Power Current(Imp)	(A)	13.47	13.54	13.61
Open-circuit Voltage (Voc)	(V)	39.33	39.53	39.73
Short-circuit Current(Isc)	(A)	14.08	14.15	14.22
Module Efficiency	(%)	22.02	22.27	22.54
Operating Temperature		-40°C~+85°C		
Maximum System Voltage		□1500V		
Maximum Series Fuse Rating		25A		
Mechanical Test Load		Front 5400Pa Rear 2400Pa		

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

ELECTRICAL DATA @ NMOT		ECO-440M-54 LHC-DGBF black	ECO-445M-54 LHC-DGBF black	ECO-450M-54 LHC-DGBF black
Peak Power(Pmax)	(W)	331	335	339
MPP Voltage (Vmp)	(V)	30.42	30.62	30.82
MPP Current(Imp)	(A)	10.88	10.94	11.00
Open Circuit Voltage (Voc)	(V)	37.36	37.55	37.64
Short Circuit Current(Isc)	(A)	11.36	11.42	11.48

*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	-0.29%/k
Temperature coefficient of Voc	-0.25%/k
Temperature coefficient of Isc	0.04%/k
NMOT	43±2°C

MECHANICAL DATA

Cell Type	Mono-Crystalline N-TYPE
Cell Arrangement	108pcs (2(6×9))
Dimension (L×W×H)	1762 x 1134 x 30 mm
Weight	22.5kg
Front Cover	1.6mm high transmittance, AR coated tempered glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68, 3 Bypass Diodes
Cable Type	4mm²
Length of Cable	1000mm
Connector	Compatible with MC4 PV Connector

OPTIONAL

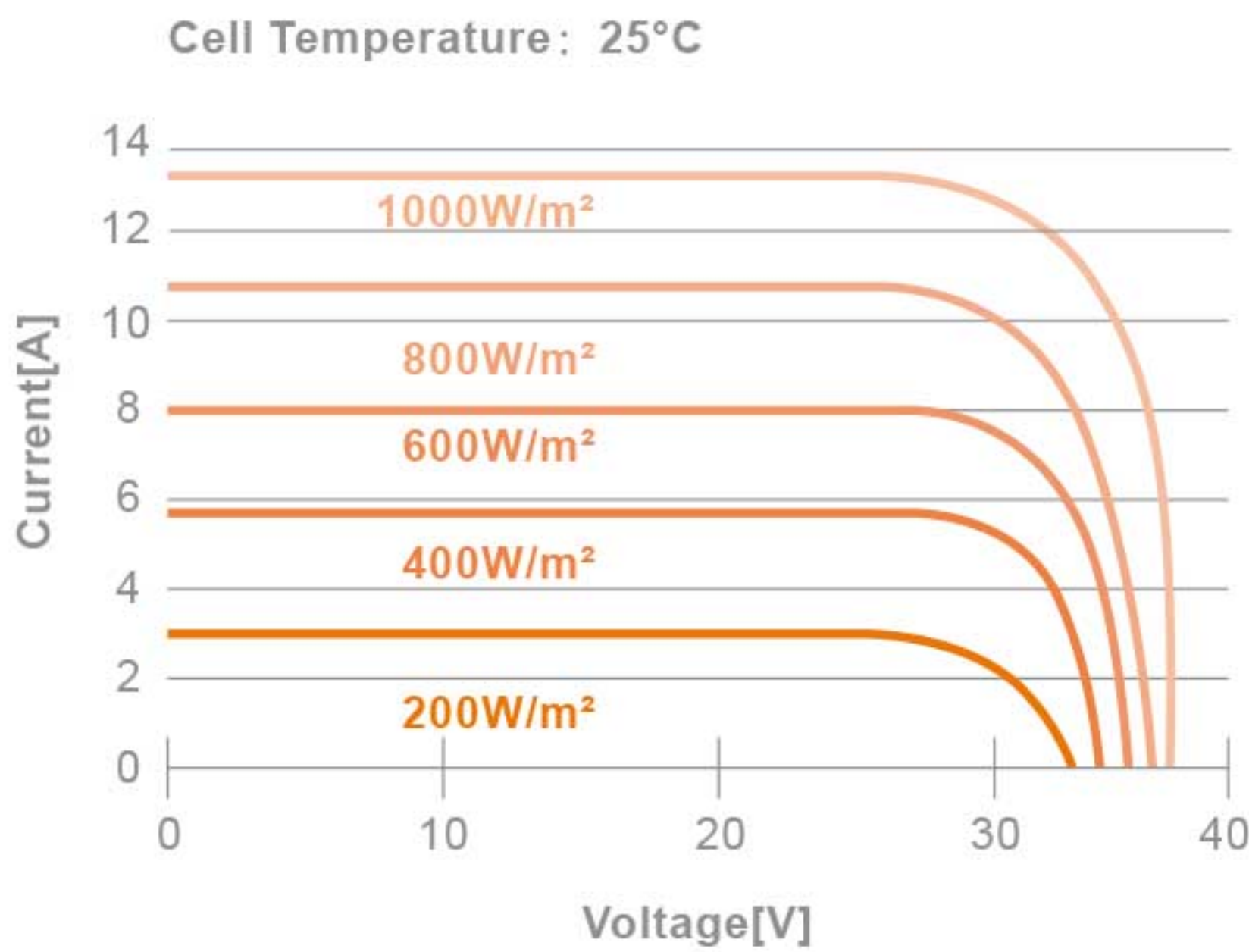
Frame	□Black □Silvery
Backsheet	□1.6mm high transmittance, heat strengthened glass(mesh)
Connector	□Original MC4
Cable	□Customized
Module Size	□Customized

PACKING MANNER

Packing Type	40'HQ
Piece/Pallet	36
Piece/Container	936

*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

