

CLASSIC PLUS™

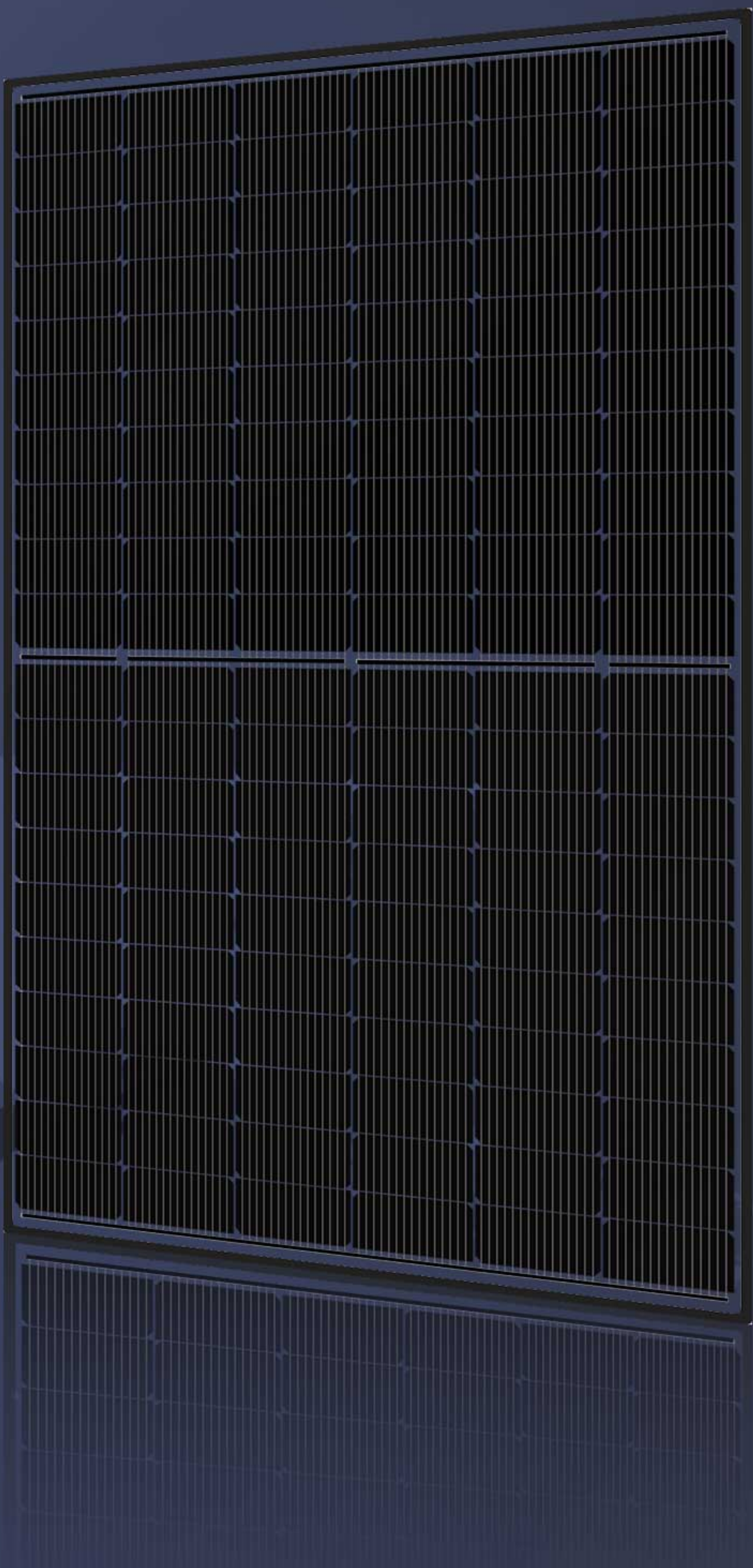


ECO-440-450M-54LHC-DGBF (TOPCON)

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(TOPCON)

| ELECTRICAL DATA @ STC       |     | ECO-440M-54<br>LHC-DGBF  | ECO-445M-54<br>LHC-DGBF | ECO-450M-54<br>LHC-DGBF |
|-----------------------------|-----|--------------------------|-------------------------|-------------------------|
| 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/ m<sup>2</sup> , Module Temperature 25°C, AM 1.5

| ELECTRICAL DATA @ NMOT     |     | ECO-440M-54<br>LHC-DGBF | ECO-445M-54<br>LHC-DGBF | ECO-450M-54<br>LHC-DGBF |
|----------------------------|-----|-------------------------|-------------------------|-------------------------|
| 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/ m<sup>2</sup> , 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        | 4mm <sup>2</sup>                                   |
| Length of Cable   | 1000mm                                             |
| Connector         | Compatible with MC4 PV Connector                   |

### OPTIONAL

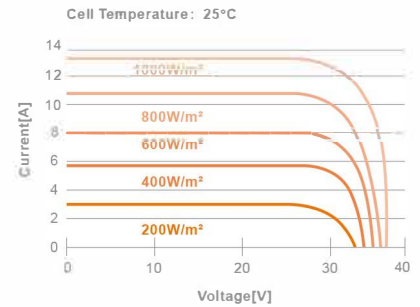
|             |                                                     |
|-------------|-----------------------------------------------------|
| Frame       | □Black □Silvery                                     |
| Backsheet   | □ 1.6mm high transmittance, heat strengthened glass |
| Connector   | □Original 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

