

# N-Type TOPCon

## 605Wp-625Wp

132 Half-Cell N-Type TOPCon Dual  
Glass Bifacial Module  
**AE13TDXXXTHC16B5**

**23.1%**

Maximum  
Efficiency

**15 YEARS**

Product  
Warranty

**30 YEARS**

Performance  
Warranty

**0~+5W**

Positive Power  
Tolerance

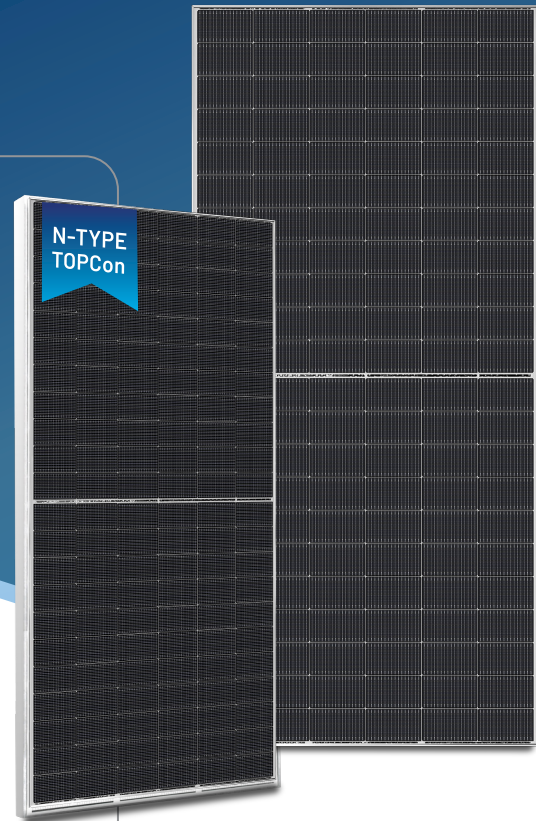
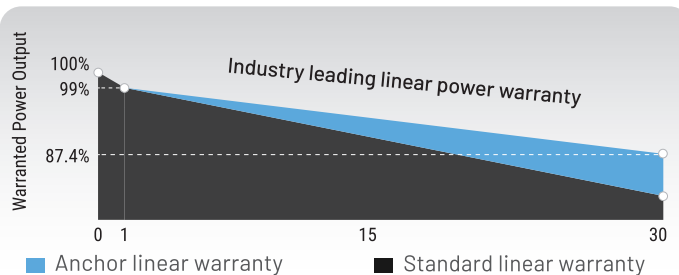
**80% +/- 5%**

Bifaciality  
Factor

Industry-Leading Warranty based on Nominal Power

**1%** First Year  
Degradation

**0.4%** Lowest Annual  
Degradation



Lowest Temperature  
Coefficient - 0.29%/°C



Withstands Harsh Environment



Apt for Ground Mount and  
Commercial & Industrial use



Tested for Wind Load (2400 pascals)  
and Snow Load (5400 pascals)



Superior Resistance  
to effects of PID



N-Type TOPCon with Zero LID Loss

Certifications  
and Standards:



IEC 61215, IEC 61730, IEC 61701, IEC 62716



\*Please refer to PLSIND Standard Module Installation Manual and Product Warranty for details

# AE13TDXXXTHC16B5

## ELECTRICAL CHARACTERISTICS

| STC                             | AE13TDXXXTHC16B5 |        |        |        |        |
|---------------------------------|------------------|--------|--------|--------|--------|
| Nominal Maximum Power (Pmax)    | 605W             | 610W   | 615W   | 620W   | 625W   |
| Optimum Operating Voltage (Vmp) | 40.31V           | 40.48V | 40.65V | 40.82V | 40.98V |
| Open Circuit Voltage (Voc)      | 48.50V           | 48.70V | 48.90V | 49.10V | 49.30V |
| Optimum Operating Current (Imp) | 15.01A           | 15.07A | 15.13A | 15.19A | 15.25A |
| Short Circuit Current (Isc)     | 15.89A           | 15.95A | 16.01A | 16.07A | 16.13A |
| Module Efficiency               | 22.4%            | 22.6%  | 22.8%  | 23.0%  | 23.1%  |
| Operating Temperature ( °C)     | -40°C ~ +85°C    |        |        |        |        |
| Maximum System Voltage          | 1500 V DC (IEC)  |        |        |        |        |
| Maximum Series Fuse Rating      | 35 A             |        |        |        |        |
| Power Tolerance                 | 0, +5Wp          |        |        |        |        |

STC: Irradiance 1000 W/m², Cell Temperature 25°C, AM=1.5

# PLSIND reserves the right to adjust the listed parameters without notice.

| NMOT                            | AE13TDXXXTHC16B5 |        |        |        |        |
|---------------------------------|------------------|--------|--------|--------|--------|
| Nominal Maximum Power (Pmax)    | 462.9W           | 466.6W | 470.4W | 474.2W | 476.7W |
| Optimum Operating Voltage (Vmp) | 38.00V           | 38.10V | 38.30V | 38.50V | 38.60V |
| Open Circuit Voltage (Voc)      | 46.10V           | 46.30V | 46.50V | 46.70V | 46.90V |
| Optimum Operating Current (Imp) | 12.19A           | 12.23A | 12.28A | 12.33A | 12.34A |
| Short Circuit Current (Isc)     | 12.81A           | 12.86A | 12.91A | 12.95A | 13.00A |

NMOT: Irradiance 800 W/m², ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.

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| BIFACIAL GAIN (80±5%) | AE13TDXXXTHC16B5 |        |        |        |        |
|-----------------------|------------------|--------|--------|--------|--------|
| 5% Power Pmax         | 635.2W           | 640.5W | 645.7W | 651.0W | 656.2W |
| 15% Power Pmax        | 695.7W           | 701.5W | 707.2W | 713.0W | 718.7W |
| 25% Power Pmax        | 756.2W           | 762.5W | 768.7W | 775.0W | 781.2W |

• Bifacial gain depends on the power plant design and albedo of installation site

• Power Bifaciality=Pmax(Rear)/Pmax(Front) and Pmax Front are tested under STC Measuring Tolerance: ±3%

## TEMPERATURE CHARACTERISTICS

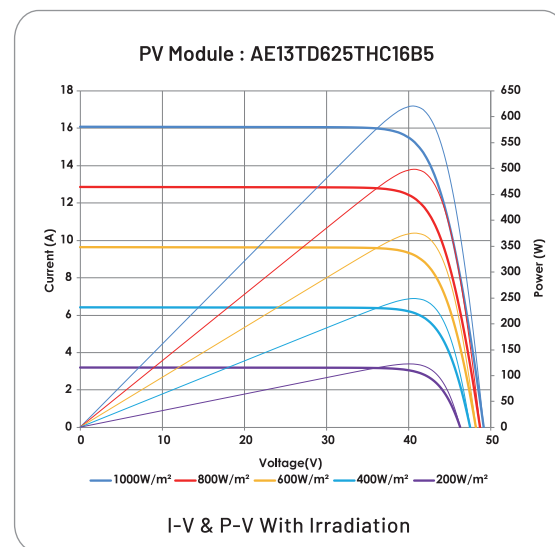
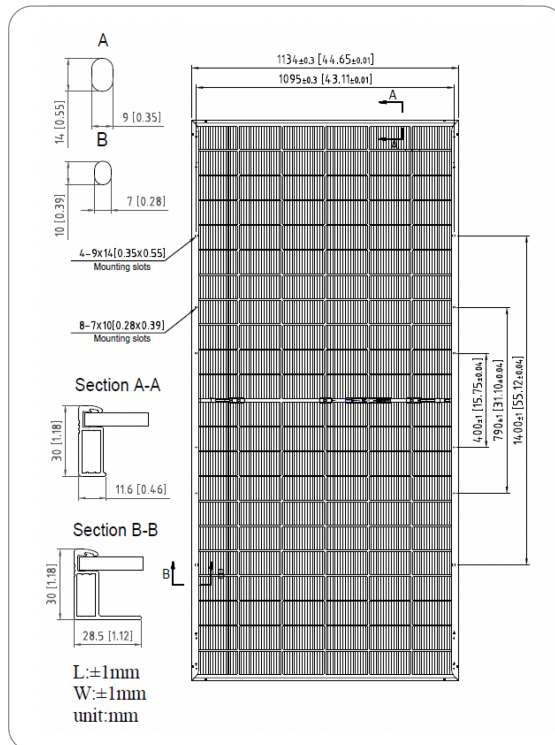
|                                             |             |
|---------------------------------------------|-------------|
| Temperature Coefficient of Pmax(γ)          | -0.29 %/°C  |
| Temperature Coefficient of Voc(β)           | -0.25 %/°C  |
| Temperature Coefficient of Isc(α)           | +0.046 %/°C |
| Nominal Module Operating Temperature (NMOT) | 42±2°C      |

## MECHANICAL CHARACTERISTICS

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| Cell Type     | N-type TOPCon 182mm X 210mm                                           |
| No. of Cells  | 132 (11X6    11X6)                                                    |
| Dimensions    | 2382 X 1134 X 30 mm                                                   |
| Weight        | 32.5kg                                                                |
| Front Glass   | 2.0 mm Semi Tempered glass                                            |
| Rear Cover    | 2.0 mm Semi Tempered glass                                            |
| Frame         | Anodized aluminium alloy                                              |
| Junction Box  | 3 Split, IP68 Rated                                                   |
| Output Cables | 4.0 mm²<br>(-) 1400 mm and (+) 1400 mm in length or customized length |
| Connectors    | MC4 Compatible/ MC4-EV02/ TL-CABLE01S / STP-XC4                       |

## PACKAGING CONFIGURATION

|                          |                       |                       |        |
|--------------------------|-----------------------|-----------------------|--------|
| Container                | 40'HC                 | Modules per pallet    | 36     |
| Pallets per container    | 20                    | Modules per container | 720    |
| Packaging box dimensions | 2396 X 1120 X 1255 mm | Package weight        | 1226kg |



I-V & P-V With Irradiation

# PLSIND stands for Panasonic Life Solutions India Pvt. Ltd.

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Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.