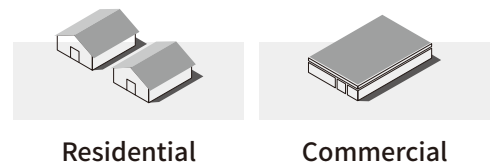


# YTM410-430N-54/B

Adopting N-type TOPCon technology on M10 wafer, achieves high efficiency and ultra-low degradation, and perfectly matches mainstream system design and mature logistics scheme.

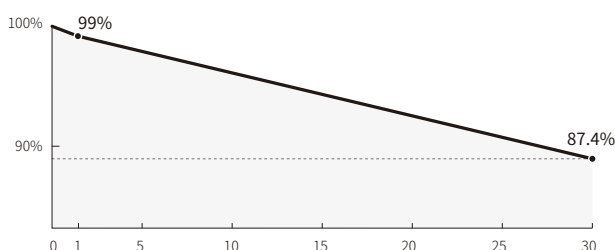
Advanced module technologies are adopted like multi-busbar, half cell, non-destructive cutting, and intelligent soldering.

All-black module perfectly combines with the building.



## Warranty

Product warranty 25 Years      1<sup>st</sup> year degradation  $\leq 1\%$   
Linear power warranty 30 Years      Annual degradation  $\leq 0.40\%$

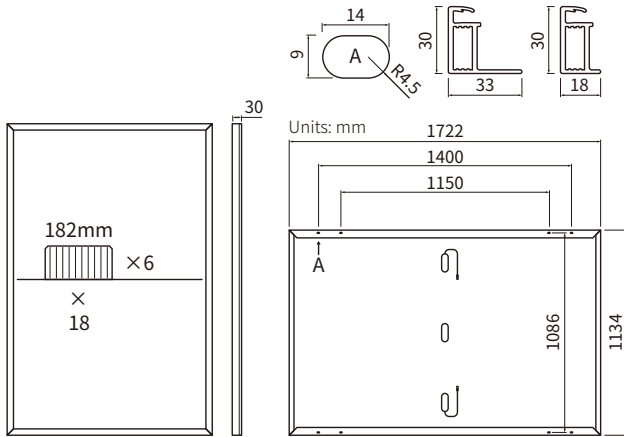


## Certificates

IEC 61215, IEC 61730  
ISO 9001:2015 Quality management systems  
ISO 14001:2015 Environmental management systems  
ISO 45001:2018 Occupational health and safety management systems



# YTM410-430N-54/B



## Mechanical Parameters

|              |  |
|--------------|--|
| Cell type    | Mono TOPCon                                |
| No. of cells | 108 (6*18)                                 |
| Junction box | IP68, 3 diodes                             |
| Cable        | 4mm <sup>2</sup> ; (±)1200mm or customized |
| Glass        | Single glass, 3.2mm                        |
| Frame        | Anodized aluminum alloy frame              |
| Weight       | 21.4kg±3%                                  |
| Dimensions   | 1722mm x 1134mm x 30mm                     |
| Packaging    | 36 pcs/pallet, 936 pcs/40HQ container      |

## Electrical Parameters

STC: AM1.5 1000W/m<sup>2</sup> 25°C NMOT: AM1.5 800W/m<sup>2</sup> 20°C 1m/s

| Module type                               | YTM410N-54/B |       | YTM415N-54/B |       | YTM420N-54/B |       | YTM425N-54/B |       | YTM430N-54/B |       |
|---|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
|   | STC          | NMOT  | STC          | NMOT  | STC          | NMOT  | STC          | NMOT  | STC          | NMOT  |
| Rated maximum power P <sub>max</sub> (W)  | 410          | 308   | 415          | 312   | 420          | 316   | 425          | 320   | 430          | 324   |
| Open circuit voltage Voc (V)              | 37.80        | 35.85 | 38.00        | 36.04 | 38.19        | 36.22 | 38.38        | 36.40 | 38.57        | 36.58 |
| Short circuit current I <sub>sc</sub> (A) | 13.88        | 11.24 | 13.96        | 11.30 | 14.04        | 11.38 | 14.12        | 11.44 | 14.20        | 11.51 |
| Maximum power voltage V <sub>mp</sub> (V) | 31.16        | 29.01 | 31.37        | 29.19 | 31.56        | 29.35 | 31.74        | 29.53 | 31.93        | 29.67 |
| Maximum power current I <sub>mp</sub> (A) | 13.16        | 10.62 | 13.23        | 10.69 | 13.31        | 10.77 | 13.39        | 10.84 | 13.47        | 10.92 |
| Module efficiency (%)                     | 21.0         |       | 21.3         |       | 21.5         |       | 21.8         |       | 22.0         |       |

## Temperature Coefficients

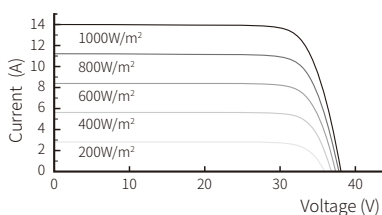
|   |            |
|---|------------|
| Temperature coefficient α <sub>Isc</sub>  | +0.046%/°C |
| Temperature coefficient β <sub>Voc</sub>  | -0.250%/°C |
| Temperature coefficient γ <sub>Pmax</sub> | -0.300%/°C |

## Operating Conditions

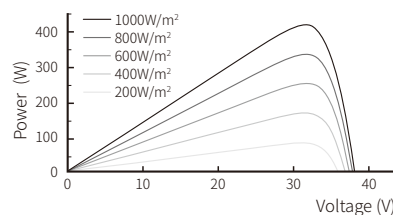
|   |             |                                     |         |
|---|-------------|-------------------------------------|---------|
| Operating temperature                             | -40°C~+70°C | Nominal operating cell temperature  | 45±2°C  |
| P <sub>max</sub> , Voc, I <sub>sc</sub> tolerance | ±3%         | Front side Max. static test loading | 5400 Pa |
| Power selection                                   | 0~+5W       | Rear side Max. static test loading  | 2400 Pa |
| Maximum system voltage                            | 1500V DC    |                                     |         |
| Maximum series fuse rating                        | 25A         |                                     |         |

## Graphs (YTM420N-54/B)

Current - Voltage Curve



Power - Voltage Curve



Current - Voltage Curve

