# TPSh-M12M132SH1W





**Half Cell:**

Half cell design allows the module to be operated in half of the original current,

lowers the internal loss and decreases the CTM loss, generating more power.

Topray Solar half cell operates in lower temperature, decreases the risk of hot spot

and .947 0Td(.980 0Td(e)Tj.pTj.933 0.6 0Td(t)Tj-39.12-

## Qualifications and Certification

# TPSh-M12M132SH1W

# 630-670W

## Mechanical Specification

| | |
|---|---|
| Cell Type | Mono Crystalline 210x105 mm |
| Numbers of cells | 132 |
| Dimension | 2384x1303x35mm |
| Weight | 32KG |
| Front Glass | 3.2 mm low iron tempered glass |
| Frame | Anodized aluminum |
| Junction Box | IP 67, with 3 bypass diodes |
| Connector | MC4 comatible |
| Output Cables | TUV tested,length 450mm,4.0mm$^2$ |

| Module Series | TPSh-M12M132SH1W | | | | |
|---|---|---|---|---|---|
| Maximum Power at STC(Pmax) (W) | 630 | 640 | 650 | 660 | 670 |
| Short Circuit Current(Isc) (A) | 18.14 | 18.21 | 18.33 | 18.38 | 18.48 |
| Open Circuit Voltage(Voc) (V) | 44.52 | 44.92 | 45.25 | 45.74 | 46.11 |
| Maximum Power Current(Impp) (A) | 17.03 | 17.13 | 17.23 | 17.29 | 17.38 |
| Maximum Power Voltage(Vmpp) (V) | 37.00 | 37.37 | 37.74 | 38.18 | 38.56 |
| Module Efficiency | 20.28% | 20.60% | 20.92% | 21.25% | 21.57% |
| Power Tolerance | 0/+3% | 0/+3% | 0/+3% | 0/+3% | 0/+3% |

## Mechanical drawings (mm)




## TEMPERATURE CHARACTERISTICS

| | |
|---|---|
| Nominal Operating Cell Temperature(NOCT) | 44±2°C |
| Temperature Coefficient of Pmax( ) | -0.4%/K |
| Temperature Coefficient of Voc( ) | -0.37%/K |
| Temperature Coefficient of Isc( ) | +0.05%/K |

## PACKING CONFIGURATION

N_aigle gldmp k_rgml8 1/ naq ncp n_jjcr* 336 naq ncp 2.%FO aml r_gl cp

China Headquarter

Tel: 0086 755 86612689 / 86612630

Fax: 0086 755 86612620

Email: sales@topraysolar.com;franklin@topraysolar.com

Address:A-802,Future Plaza,Qiaochengbei Rd., Nanshan, Shenzhen, China

www.topraysolar.com; www.topraysolar.cn