# TPSh-M12M132DH1T



Residential Roof



Utility Scale Ground Mounted

**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 the loss due to temperature coefficient, enhancing the performance and reliability. Module circuit separated into two sections that are connected in parallel. Combined with built-in bypass diodes, providing better performance under shading scenario.
- Advanced laser cutting technology ensures no damage to the cell during cutting process.
- Encapsulated with our own Topray Solar glass with highest effective solar transmittance from 380nm to 1100nm of 94.5% certified by National Lab, enhancing the performance and guarantees more operational hours during day to day usage.
- Equipped with anti-soiling film and hydrophilic coating on the front glass, Topray Solar modules are capable of self-cleaning, ensuring maximum performance and requiring minimum manual cleaning.

Module certified by TUV

For SNOW ZONE III, withstand high level of wind loads(2400Pa) and snow loads(5400Pa).

For PID test. No Potential Induced Degradation caused by High Voltage Stress.

For salt mist corrosion, ammonia corrosion test.

## Qualifications and Certification