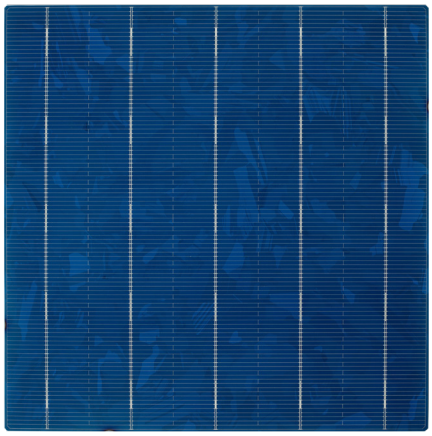
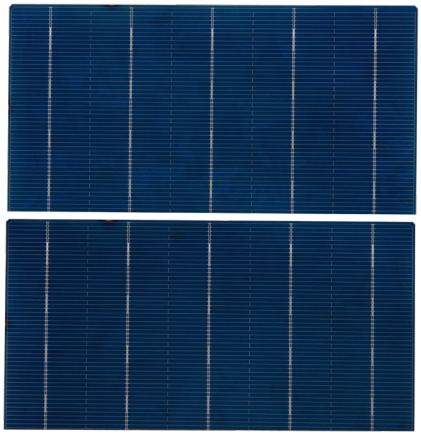
High Efficient Half Cell Module



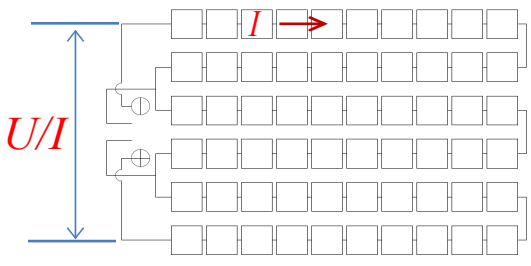


1/2 + 1/2 > 1

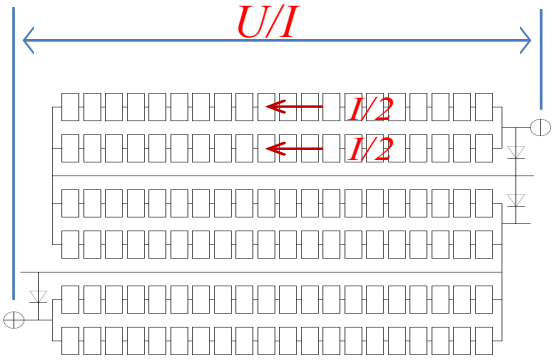
Features

Optimize circuit and decrease internal loss

Unit current of half-cell module is half of the standard one. Electrical conductivity is enhanced with same cell-connector and internal power loss is reduced, which increase the power rating.



Conventional module
(Six strings in series)



Half cell module
(Hybrid mode with series-connected after parallel-connected)

Trust Suntech to Deliver Reliable Performance Over Time

SUNTECH

High Efficient Half Cell Module

Decrease module operating temperature and increase power yield

Studies have indicated that lower operating temperature is helpful to the increase of energy harvest. When the ambient temperature is 35℃, half-cell module temperature is 2.5℃ lower than the standard one. Measured data shows power yield per watt increases by 4.64%.

Increase power output

Fill factor rises with decline of series resistance. Power gain stabilized at over 2%, which means module power can increase by 5-10W.

Reduce current mismatch loss

Under the same conditions of current mismatch, when low-current half cells are occurred in the same string, then mismatch loss is half of the conventional module.

Unique distributed jumping wire design

The traditional complex circuit is optimized by using the distributed junction box design. When the module head and tail direction is in the cross arrangement, the power loss is reduced and the output power is increased.

Decrease hot spot temperature and effect

Unit current reduces by half and hot spot temperature of half-cell module drops by 20~25℃ compared to the conventional one, which alleviates hot spot effect.

Three diodes protect three parallel-connected strings respectively to reduce hot spot.

Certifications and standards:
IEC 61215, IEC 61730, conformity to CE