

# RECOM HJT Bifacial Module

# **Overview**

The Heterojunction Technology (HJT) combines high efficiency with a simple design reducing the number of manufacturing steps and achieving an important cost reduction. It combines the advantages of mono crystalline silicon solar cells with the good absorption and the superior passivation characteristics of amorphous silicon leading to a higher efficiency.

# **Key Benefits**

#### THE ADVANCED HETEROJUNCTION TECHNOLOGY

- Is highly efficient and produces more power per square meter than usual high efficiency cells (20% more efficiency than a typical mono cell).
- 2. Ensures higher efficiency and delivers higher output even at high temperatures (much lower temperature coefficient compared to a typical mono cell).

# SMART WIRE TECHNOLOGY

HJT RECOM modules support the innovative smart wire (SWT) technology, a revolutionary cell wiring process that uses micro-wires instead of the traditional busbars.

#### SWT main benefits are:



Increase in efficiency by lowering ohmic losses and improved light management



Low temperature contacting during module lamination



Enhancement of module reliability



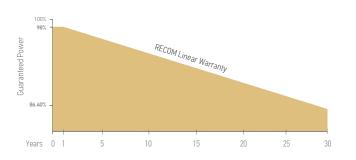
Improved aesthetics







### **Linear Performance Warranty**



#### **Electrical Characteristics**

		* BIFACIAL MODULES							
		60 Cell Modules			72 Cell Modules				
Rated Power	325W	330W	335W	340W	390W	395W	400W	405W	410W
Maximum Power Voltage (Vmp)	36.50V	36.80V	37.10V	37.30V	44.10V	44.40V	44.60V	44.90V	45.20V
Maximum Power Current (Imp)	8.85A	8.97A	9.04A	9.05A	8.85A	8.90A	8.96A	9.02A	9.08A
Open Circuit Voltage (Voc)	44.30V	44.50V	44.80V	45.30V	53.20V	53.20V	53.60V	53.90V	54.50V
Short Circuit Current (Isc)	9.18A	9.30A	9.37A	9.39A	9.31A	9.35A	9.41A	9.47A	9.55A
Module Efficiency	19.10%	19.13%	19.16%	19.19%	19.22%	19.25%	19.28%	19.31%	19.34%
Maximum System Voltage		1.500 V DC							

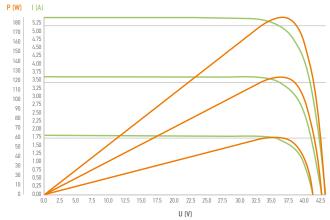
Tested at Standard Test Conditions. Measurement tolerances:  $\pm$  3%

#### **HJT Cell Structure**

# Transparent Electrode (TCO) i-type Amorphous Layer The amorphous n-type silicon layers crystalline reduce the carriers recombination to a silicon. Double minimum level sided textured surface **Amorphous** Doped Layer

# I-V Curve

Low Irradiance IV Curves (200, 400, 600 W/m²)



# Mechanical Data

Dimensions	1660mm x 990mm (60-cell modules)
	1983mm x 998mm (72-cell modules)

# Temperature Characteristics

Pmax Temperature Coefficient	-0.25% / °C
Voc Temperature Coefficient	-0.27% / °C
Isc Temperature Coefficient	+0.045% / °C

\*\*Release 2018-09, v1.1.

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<sup>\*</sup>Bifacial Gain: An energy gain of 20% can be achieved from the back side compared to the front side at the standard test conditions, depending on the installation conditions.