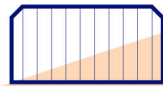
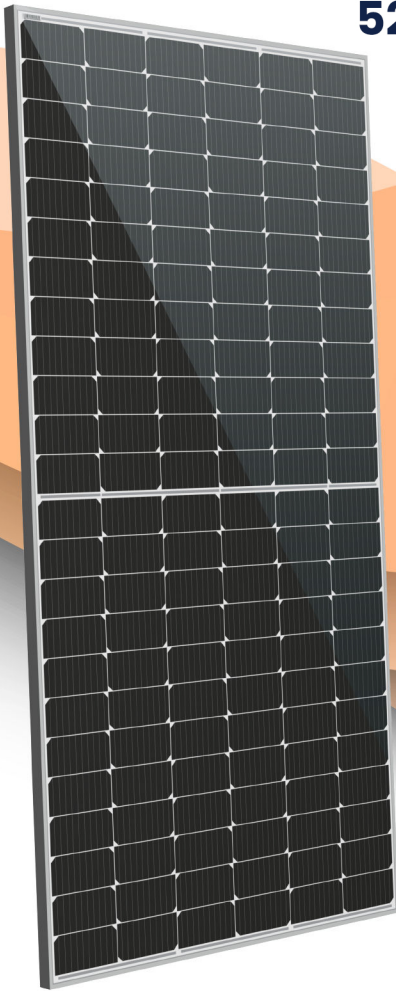


# TAPI™ DCR

**SOLEX**<sup>®</sup>  
OWN YOUR POWER...

520-540 Watt



144 Half Cell



Up to 20.91%



Up to +2.99Wp Positive

## HOW YOU BENEFIT



Optimal yield in all weather conditions; excellent lowlight and temperature behaviour



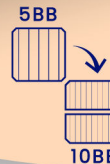
Excellent stability; tested for wind loads up to 2,400 Pa and snow loads up to 5,400 Pa



Better Performance under shade; separate operation of upper & lower half of the module



Minimized micro-cracks with innovative non-destructive cutting technology



Lower Internal Resistance; Boosts module power that helps in achieving minimal power loss as compare to previous generation module

12  
YEARS  
27  
YEARS

12 - years product warranty &  
27 - years linear performance warranty

IS 14286: 2010  
IS/IEC 61730-1: 2004  
IS/IEC 61730-2: 2004



## QUALITY & RELIABILITY

- ✓ Manufactured in an ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified Facility.
- ✓ Certificates  
IEC - 61215, IEC - 61730-1&2, IEC - 61701, IEC - 62804, IEC - 61853, IEC - 60068, IEC - 62716, IS - 14286, IS/IEC 61730-1&2
- ✓ IP68 Rated Junction Box for Long-Term Weather Endurance.
- ✓ Made with high-grade raw material to achieve Quality, Durability, Efficiency, and through output.

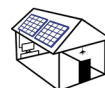
## IDEAL SOLUTION FOR



Ground Mounted Installations



Commercial and Industrial Rooftop installations



Residential Rooftop Installations

\*Model Image & Model Name Is For Reference Only, Actual May Vary.

# TECHNICAL DATASHEET

## Technical Data for SMF72HM10-AAA (520 - 540) - Monocrystalline Module and SMB72HM10-AAA (520 - 540) - Bi-Facial Monocrystalline Module

### ELECTRICAL PARAMETER AT STC<sup>#1,2</sup>

MODULE TYPE	SMF/SMB72HM10*-AAA (520 - 540)				
Capacity rating - Pmax (Wp)	520	525	530	535	540
Power Tolerance (Wp)	0-3	0-3	0-3	0-3	0-3
Open circuit voltage - Voc(V)	49.19	49.32	49.45	49.58	49.71
Short circuit current - Isc(A)	13.27	13.35	13.43	13.51	13.59
Rated voltage - Vmp(V)	41.28	41.41	41.54	41.67	41.80
Rated current - Imp(A)	12.60	12.68	12.76	12.84	12.92
Module efficiency (%)	20.13	20.33	20.52	20.71	20.91

#1 Under Standard Test Conditions (STC) of irradiance 1000 W/m<sup>2</sup>, spectrum AM 1.5 and cell temperature of 25°C.

#2 Except Pmax other parameters have a tolerance of ± 3%.

### BI-FACIAL OUTPUT - REAR SIDE POWER GAIN \*\*

5 % Gain	546	551	557	562	567
10 % Gain	572	578	583	589	594
15 % Gain	598	604	610	615	621
20 % Gain	624	630	636	642	648

\*\* Additional Power Gain from rear side is depends on albedo. (Higher albedo, the higher power gain.)

### ELECTRICAL PARAMETER AT NOCT<sup>#3</sup>

Power (W)	384.54	388.20	391.88	395.57	399.28
Vmp(V)	38.11	38.23	38.35	38.47	38.59
Imp(A)	10.09	10.15	10.22	10.28	10.35
Voc(V)	45.81	45.93	46.05	46.17	46.30
Isc(A)	10.73	10.80	10.86	10.92	10.99

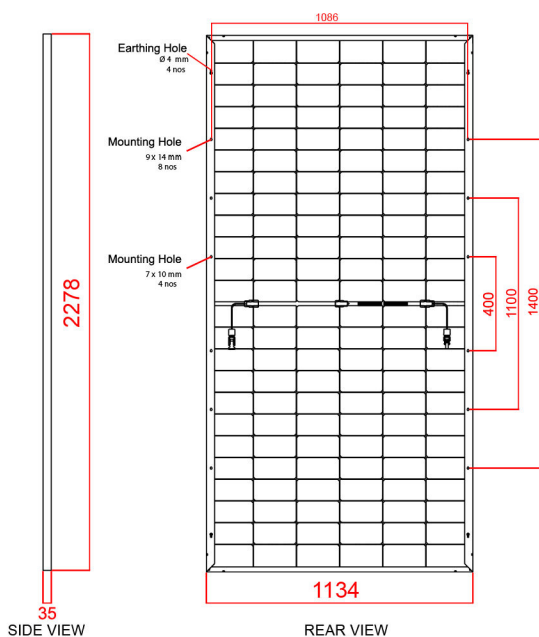
#3 NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec

### WARRANTY

Product warranty <sup>##</sup>	12 Years
Performance warranty <sup>##</sup>	27 years Linear Power Warranty for with 2% for 1st Year degradation and 0.55% from year 2 to year 27

<sup>##</sup>applicable only when module installation done as per Solex's installation manual.

### DRAWING (MEASUREMENTS ARE IN MM)



### MECHANICAL SPECIFICATION

SPECIFICATION	DETAILS
Solar cells	Monocrystalline Silicon (PERC), Bi facial MBB DCR Cell
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	UV protected White/Transparent backsheet
Frame	Silver Anodized Aluminium Alloy
Front glass	3.2 mm, High Transmission, ARC Tempered Glass
Dimensions	(L) 2278 mm x (W) 1134 mm x (H) 35mm
Weight	~28 kg
J-box	IP 68 certified, 3 diodes junction box
Cable	Solar cable 400 mm length, 4 mm <sup>2</sup>
Connectors	Compatible with MC4 connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C ( Type I)
Surface load	Snow load 5400 Pa, wind load 2400 Pa

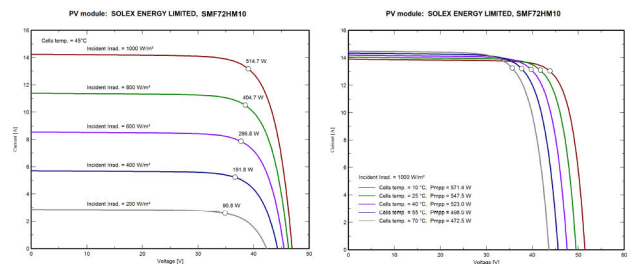
### TEMPERATURE COEFFICIENT (TC)

Temperature Coefficient (Voc)	-0.24% /°C
Temperature Coefficient (Isc)	0.04% /°C
Temperature Coefficient (Pmax)	-0.32% /°C

### PERMISSIBLE OPERATING CONDITIONS

Temperature range	-40°C to + 85°C
Max. system voltage	1500 VDC
NOCT	45± 2°C
Hail resistance	Max. diameter of 25 mm with velocity 23 m/s

### IV CURVE



- For unpacking, handling & installation instructions refer to Solex Energy's Manual guidelines available on the company website.
- Before placing an order confirm your requirements with our sales representative.
- The technical details, drawings and IV Curve here are for reference purposes only.
- Due to constant product modifications, Solex Energy Limited reserves the right to amend the above specifications without prior notice.
- Dispose-off the product as E-Waste after the end of its working life.

### PACKING CONFIGURATION

Container	40'HQ
Modules per Pallet	31
Pallets per Container	20
Modules per Container	620

## SOLEX ENERGY LTD.

Corp. Office: 301-303, Trinity Business Park, Near Madhuvan Circle, L.P. Savani Road, Pal, Surat - 395009, Gujarat, India

Regd. Office: Plot No. 131/A, Phase - 1, H.M.Road, G.I.D.C., Vitthal Udyognagar, Anand - 388121, Gujarat, India