



Solar bring the smile...

JEEM ENERGY PVT. LTD.



600 MW

Module Manufacturing
Capacity

One of the India's Advanced
Manufacturing Technology for
Solar Panels

www.jeemenergy.com

About Us...

Module Manufacturing

JEEM ENERGY stands at the forefront of sustainable innovation as a leading solar module manufacturing company - Founded in 2023. With a steadfast commitment to excellence, we harness cutting-edge technology to produce high-quality and high-Efficiency solar modules, featuring operational solar module production lines with a capacity of 600 MW per year in Rajkot, Gujarat, India.

We are manufacturing the latest technologies TOPCon modules, with the industry's leading high efficiency modules. Jeem Energy leads sustainable innovation in solar module manufacturing, prioritising excellence. Our advanced technology powers production assembly line in Rajkot, Gujarat, INDIA. - 600MW annually, set to rise to 1.2 GW soon. Sustainability drives us at every level, from operations to product delivery.



OUR VISION

To lead the clean energy movement with responsibility, innovation, and impact.



OUR MISSION

Advance clean energy through continuous innovation, advanced engineering, and world-class execution.

Reduce environmental impact and support the global transition to cleaner, more resilient energy systems.

Deliver consistent, long-term value through disciplined growth, operational excellence, and strong financial performance.

Create positive social impact by empowering communities, developing talent, and operating with integrity and accountability.

FOCUSED ON QUALITY

Our products meet the highest Global quality standards.

Our high-performance solar PV modules enable us to offer excellent utility for our partners and clients.

We offer a long-term & reliable partnership for the whole product life cycle and it is our goal to extend technological leadership over the entire value chain.



OUR VALUES

When the world and nature needed help, we came for the RESCQ.

RESPECT

We Respect the law, the environment, our employers, colleagues, communities and cultures.

ETHICS

We believe in Integrity, Honesty, and Transparency in all the aspects of our business.

SERVICE

Our clients are at the core of what we do. Our primary objective is to exceed our customers' expectations, from the quality, product, speed, responsiveness, and on-time service.

COMMITMENT

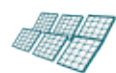
We are committed to achieving energy independence with a positive impact on the environment and society.

QUALITY

Our brand is synonymous with uncompromising quality and customer satisfaction.



Applications



On-grid Large scale utility projects



On-grid rooftop Industrial & commercial system



Off-grid rooftop systems for residential buildings



Solar water pumping systems



Off-grid systems for Filling Stations



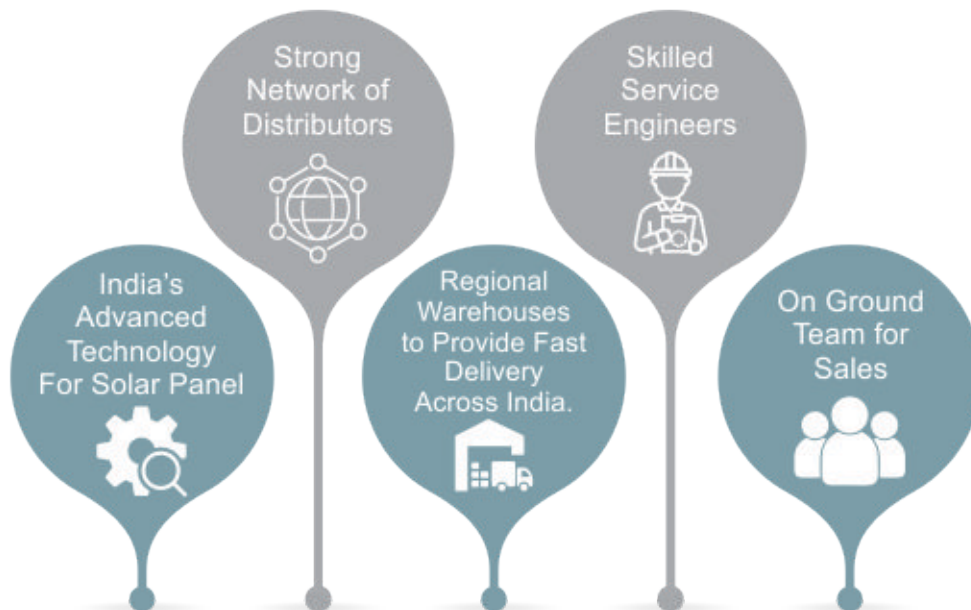
Electric Vehicles charging station



Street lighting applications

? WHY CHOOSE US

We deliver high-efficiency solar products built with advanced technology and designed for durable, consistent performance. All products are certified to meet high quality and safety standards, ensuring reliability across operating conditions. Each solution is engineered to maximize energy output and deliver long-term value.



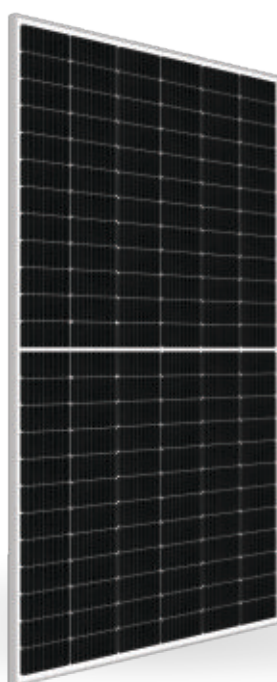
Product Certificates :

 ALMM BIS IEC	 R-72013773 BIS Qualification	 IS/IEC 61215 Design Qualification	 IS/IEC 61730-1/2 Safety Qualification	 Better Performance
 ISO 9001:2015 Certified Mfg. Process	 ISO 14000 Environmental Mgt. System	 Reinsured by ArielRe	 Split type - JB	 Better Performance

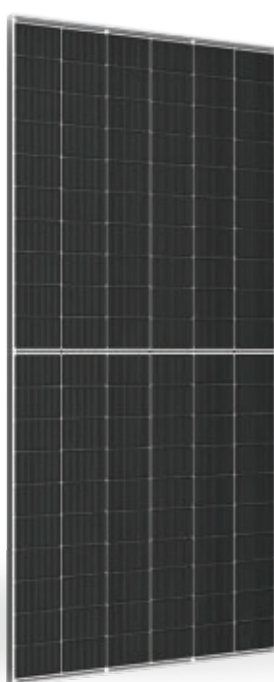
Our Product Range

Our Products - advanced Mono PERC and next-generation N-Type TOPCon solar modules - including our latest Rectangular TOPCon bifacial modules with outputs up to 500-650Wp and efficiencies as high as 23.25%.

All JEEM Energy Solar modules are ALMM-listed, BIS-approved for the Indian market. Backed by a 12-year product warranty and 25-year performance warranty, our modules are engineered to deliver maximum energy yield, making us a trusted partner for solar developers and installers worldwide.



MONO - HALF CUT
450WP - 600WP



N-TYPE TOPCON
500WP - 650WP



MONO BIFACIAL
450WP - 600WP

Salient Features :



High Salt Mist
Resistance.



SMBB
Technology.



Pre & Post EL
Chacking to Ensure
Defect Free Modules.



PID
Resistance.



IP68 High
Quality
Junction Box.



Solar bring the smile...

JEEM ENERGY PVT. LTD.

WINTEK

580 Wp - 600 Wp

N-TYPE TOPCON 16BB
BIFACIAL (GLASS TO GLASS)



30 Years Warranty for
Linear Performance*



12 Years Product
Warranty on Materials
and Workmanship*

PRODUCT KEY FEATURES



High module conversion efficiency
upto 23.22%. Highest commercial gains,
lower LCOE.



Increase shade tolerance.
Highest reliability & enhanced crack tolerant
MBB module.



Split junction box improve heat dissipation.
Best in class thermal coefficients.



Highly efficient Mono BIFACIAL cells.
Module utilizing Half cut cell for optimum
performance.



1500 VDC system voltage for lower BoS cost



PID Resistant with long term reliability.

N-TYPE
TOPCON 16BB
BIFACIAL
(GLASS TO GLASS)



PRODUCT CERTIFICATES



ALMM BIS IEC



R-72013773
BIS Qualification



IS/IEC 61215
Design Qualification



IS/IEC 61790-1/2
Safety Qualification



Better Performance



ISO 9001:2015
Certified Mfg. Process



ISO 14000
Environmental Mgt. System



Reinsured by Axa



Split type - JB



Better Performance

MADE IN INDIA

TECHNICAL DATA

580 Wp - 600 Wp

N-TYPE TOPCON 16BB
BIFACIAL (GLASS TO GLASS)

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C]

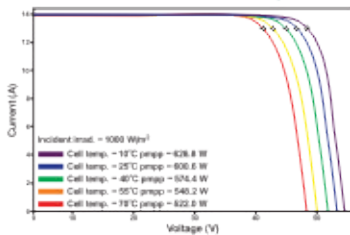
ELECTRICAL CHARACTERISTICS*	JE-16MB-GG144-580		JE-16MB-GG144-585		JE-16MB-GG144-590		JE-16MB-GG144-595		JE-16MB-GG144-600	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	580W	431W	585W	434W	590W	437W	595W	442W	600W	447W
Optimum Operating Voltage (Vmp)	42.75V	41.02V	42.94V	41.20V	43.12V	41.38V	43.33V	41.55V	43.47V	42.72V
Optimum Operating Current (Imp)	13.56A	10.51A	13.63A	10.53A	13.68A	10.57A	13.74A	10.64A	13.81A	10.47A
Open Circuit Voltage (Voc)	50.80V	48.69V	51.01V	48.78V	51.21V	48.98V	51.42V	49.38V	51.62V	49.45V
Short Circuit Current (Isc)	13.96A	11.59A	14.16A	11.63A	14.22A	11.67A	14.28A	11.72A	14.35A	11.76A
Module Efficiency	22.45%		22.64%		22.83%		23.03%		23.22%	

BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% ± 10%]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

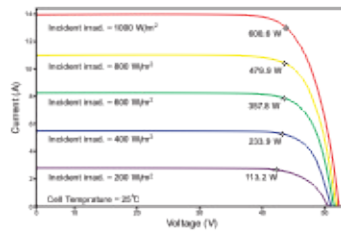
		JE-16MB-GG144-580	JE-16MB-GG144-585	JE-16MB-GG144-590	JE-16MB-GG144-595	JE-16MB-GG144-600
5%	Nominal Maximum Power (Pmax)	609W	614W	620W	625W	630W
	Module Short Circuit Current / Efficiency	14.24A/23.57%	14.29A/23.76%	14.37A/24.00%	14.43A/24.19%	14.49A/24.41%
10%	Nominal Maximum Power (Pmax)	638W	644W	649W	655W	660W
	Module Short Circuit Current / Efficiency	15.08A/24.69%	14.99A/24.92%	15.05A/25.12%	15.11A/25.36%	15.18A/25.54%
25%	Nominal Maximum Power (Pmax)	725W	732W	738W	744W	750W
	Module Short Circuit Current / Efficiency	17.14A/28.06%	17.04A/28.33%	17.11A/28.57%	17.17A/28.80%	17.25A/29.03%

IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 600 Wp Panel

IV Curve Variation with Irradiance



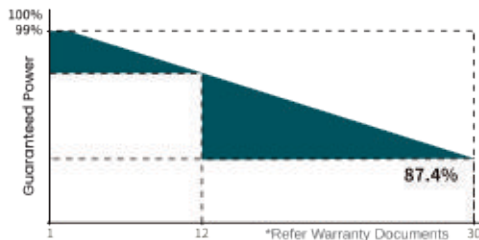
MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40°C to +85°C
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	30 A

TEMPERATURE COEFFICIENTS

Current α (Isc) :	0.0265%/°C
Voltage β (Voc) :	-0.2261%/°C
Power γ (Pmax) :	-0.2909%/°C

LINEAR PERFORMANCE WARRANTY

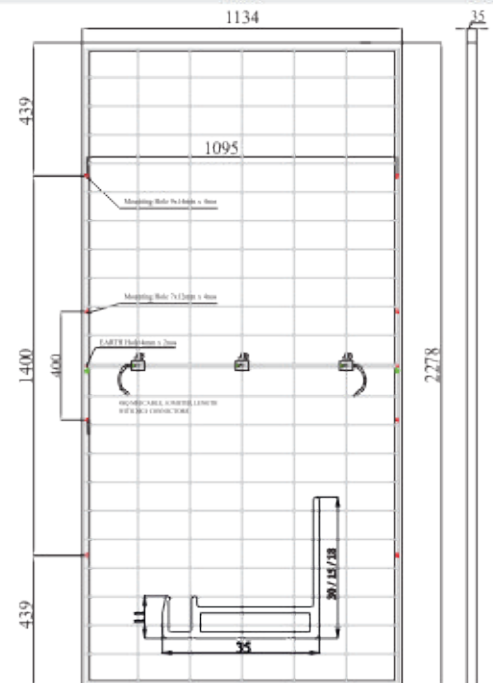


MECHANICAL SPECIFICATIONS

Dimensions	2278(L) x 1134(W) x 35(T) in mm
Weight(kg)	32
Cell type / No Of Cell	144 Half-cut N-type TOPCon Bifacial Solar cells
Frame	Anodized Aluminum Alloy (6005, Temper T6, Silver colour)
Front Cover	Low Iron semi-Tempered AR coated Glass (2 mm thick)
Encapsulate	PID resistant and UV resistant Polymeric Film/POE/EPE/EVA
Back Cover	Low Iron semi-Tempered Glass (2 mm thick)
Junction Box	30A Split Junction Box (3 nos. with individual Bypass Diode) – eatherproof (IP68)
Bypass Diode	50 A, 45 V, 200 °C max. junction temperature
Cable	4 sq. mm, 300 mm length (Customised cable length available on request)
Connectors	MC4 compatible (MC4 original available on request)
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test	5400 Pa-Front; 2400 Pa-Back (as per IEC & UL)
Mounting Holes Pitch (Y)-mm	[A] 1400, [B] 1100, [C] 400
Mounting Holes Pitch (X)-mm	1095

Caution: Please read safety and installation instructions before using the product. ***Warranty:** Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4 %/year from year 2 to year 30. Please read JEEM warranty documents thoroughly. **Disclaimer:** Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. Jeem Energy Pvt. Ltd. reserves the right to make any adjustment to the information described here. Datasheet contained in this specification do not form a representative of a single module data. @T&C Apply.

REAR VIEW & MOUNTING DETAIL



All Dimensions are in mm; Tolerance: ±2mm



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UNITEK-A

530 Wp - 550 Wp

P-TYPE MONO PERC 10BB BIFACIAL SOLAR MODULES



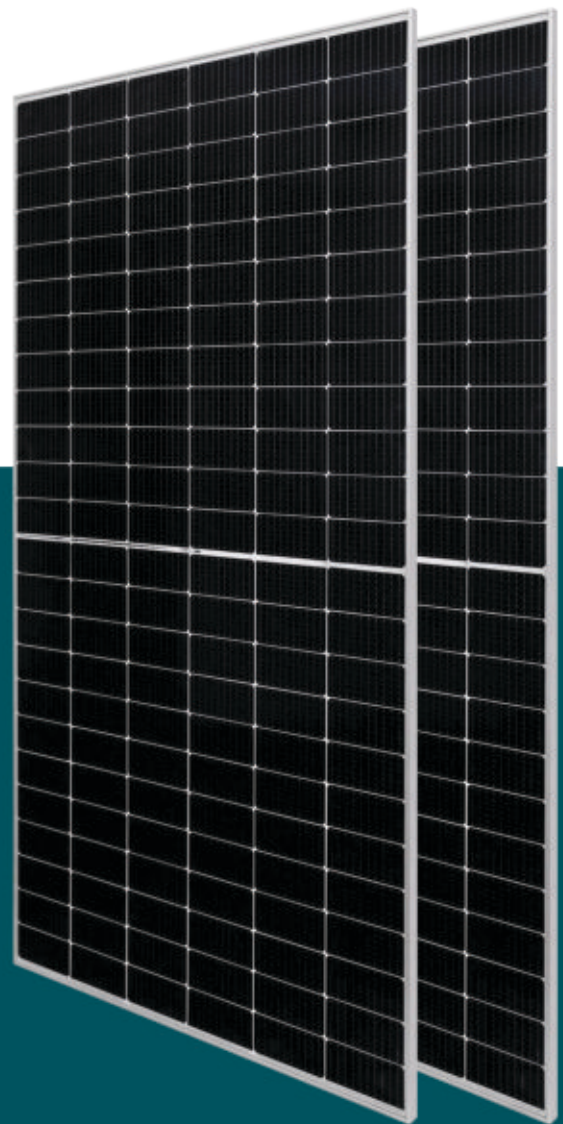
25 Years Warranty for
Linear Performance*



12 Years Product
Warranty on Materials
and Workmanship*

21.29%
Maximum Efficiency

0~+5W
Power Tolerance



PRODUCT KEY FEATURES



High module conversion efficiency
upto 21.29%. Highest commercial gains,
lower LCOE.



Increase shade tolerance.
Highest reliability & enhanced crack tolerant
MBB module.



Split junction box improve heat dissipation.
Best in class thermal coefficients.



Highly efficient Mono BIFACIAL cells.
Module utilizing Half cut cell for optimum
performance.



1500 VDC system voltage for lower BoS cost



PID Resistant with long term reliability.

THE INDUSTRY'S BENCHMARK

Jeem Solar is an internationally renowned leading solar energy cost effective befitting solutions provider having core competency in high efficiency PV module manufacturing and providing wide range EPC solutions. Our PV modules are the best in class in terms of power output and long-term reliability.

PRODUCT CERTIFICATES



ALMM BIS IEC



R-72013773
BIS Qualification



IS/IEC 61215
Design Qualification



IS/IEC 61790-1/2
Safety Qualification



Better Performance



ISO 9001:2015
Certified Mfg. Process



ISO 14000
Environmental Mgt. System



Reinsured by Axa



Split type - JB



Better Performance

MADE IN INDIA

TECHNICAL DATA

530 Wp - 550 Wp

P-TYPE MONO PERC 10BB
BIFACIAL SOLAR MODULES

ELECTRICAL PERFORMANCE [Note: Power tolerance: 0 ~ +4.99 W. Power measurement uncertainty: < ±3%. Average value of NOCT: 45.08 ± 2 °C]

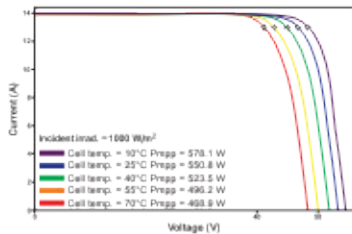
ELECTRICAL CHARACTERISTICS*	JE-10MB-BF144-530		JE-10MB-BF144-535		JE-10MB-BF144-540		JE-10MB-BF144-545		JE-10MB-BF144-550	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Nominal Maximum Power (Pmax)	530W	392W	535W	395W	540W	398W	545W	404W	550W	408 W
Optimum Operating Voltage (Vmp)	40.89V	38.13V	41.04V	38.16V	41.28V	38.51V	41.48V	38.67V	41.63V	38.86V
Optimum Operating Current (Imp)	12.97A	10.29A	13.03A	10.36A	13.08A	10.34A	13.14A	10.45A	13.22A	10.50A
Open Circuit Voltage (Voc)	49.26V	46.03V	49.42V	46.10V	49.58V	46.38V	49.74V	46.62V	49.93V	46.68V
Short Circuit Current (Isc)	13.51A	10.87A	13.59A	10.88A	13.76A	10.98A	13.87A	11.04A	13.96A	11.07A
Module Efficiency	20.51%		20.71%		20.90%		21.09%		21.29%	

BIFACIAL OUTPUT – BACKSIDE POWER GAIN @ STC* [Bifaciality Factor: 80% ± 10%]

[Note: The bifacial gain depends on the power plant design and site conditions. Electrical component ratings should be selected as per actual Bifacial gain at site (module currents indicated below)]

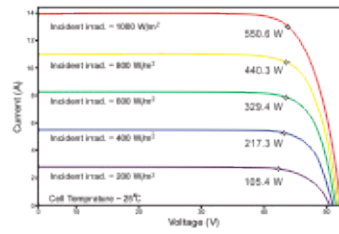
		JE-10MB-BF144-530	JE-10MB-BF144-535	JE-10MB-BF144-540	JE-10MB-BF144-545	JE-10MB-BF144-550
5%	Nominal Maximum Power (Pmax)	556W	561W	567W	572W	577W
10%	Nominal Maximum Power (Pmax)	583W	588W	594W	599W	605W
20%	Nominal Maximum Power (Pmax)	636W	642W	648W	654W	660W

IV Curve Variation with Temperature



IV Curves for Front-Side Illumination of 550 Wp Panel

IV Curve Variation with Irradiance



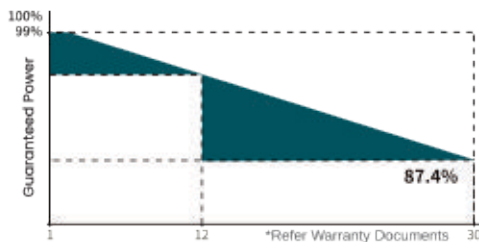
MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40°C to +85°C
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	25 A

TEMPERATURE COEFFICIENTS

Current α (Isc) :	0.0297%/°C
Voltage β (Voc) :	-0.2470%/°C
Power γ (Pmax) :	-0.2303%/°C

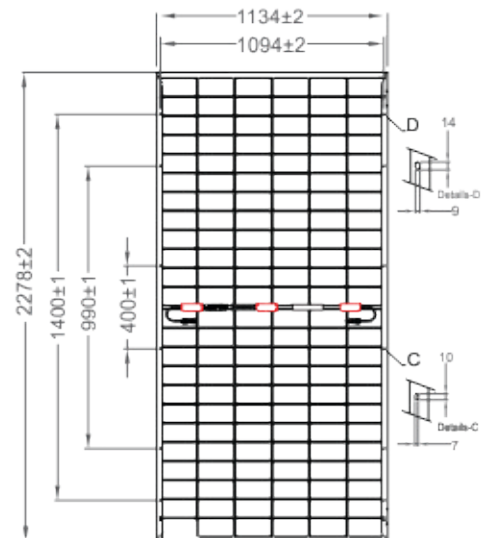
LINEAR PERFORMANCE WARRANTY



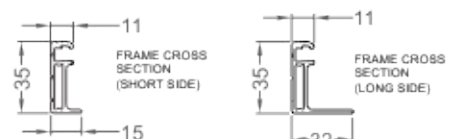
MECHANICAL SPECIFICATIONS

Dimensions (L x W x T in mm)	2278 x 1134 x 35
Weight(kg)	28.6
Cell type / No Of Cell	144 Half-cut Mono PERC Solar cells
Frame	Anodized Aluminum Alloy (6005, Temper T6, silver colour)
Front Cover	ARC coated Low Iron Tempered Glass (3.2 mm thick)
Encapsulate	Ethylene Vinly Acetate (EVA) Sheet - PID resistant and UV resistant
Back Cover	Fluoro-polymer Backsheet (Transparent colour)
Junction Box	Split Junction Box (3 nos. with individual Bypass Diode) - Weatherproof (IP68)
Bypass Diode	40 A, 45 V, 200 °C max. junction temperature
Cable	4 sq. mm, 300 mm length (Customised cable length available on request)
Connectors	MC4 compatible (MC4 original available on request)
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1400, [B] 990, [C] 400
Mounting Holes Pitch (X)-mm	1095

REAR VIEW & MOUNTING DETAIL



All Dimensions are in mm; Tolerance: ±2mm



Caution: Please read safety and installation instructions before using the product. ***Warranty:** Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4 %/year from year 2 to year 30. Please read JEEM warranty documents thoroughly. **Disclaimer:** Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. Jeem Energy Pvt. Ltd. reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.



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UNITEK-B

530 Wp - 550 Wp

**MONO PERC 10BB
MONOFACIAL SOLAR MODULES**



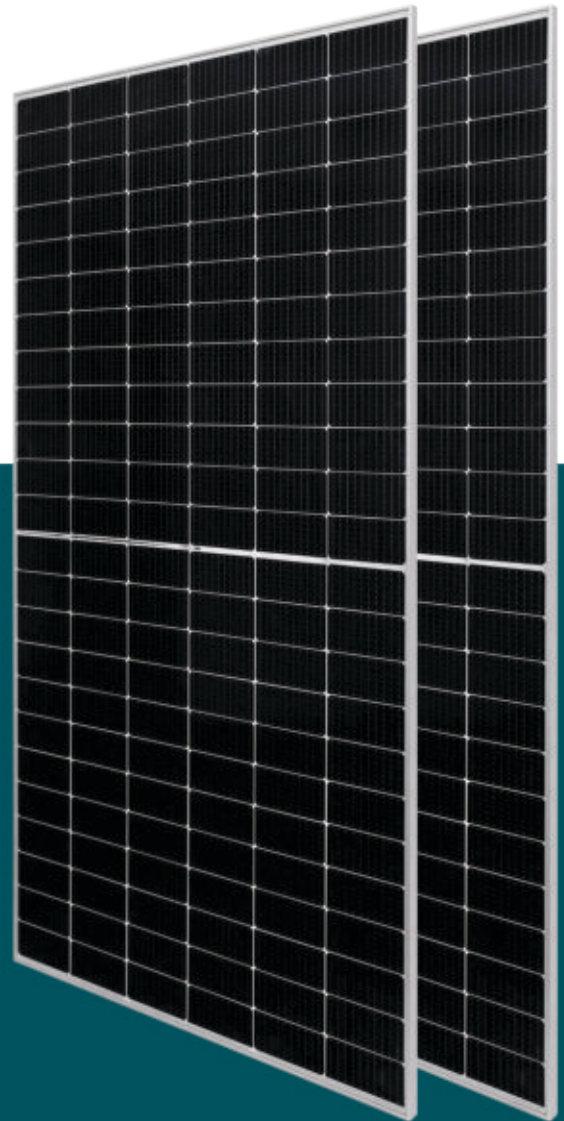
25 Years Warranty for
Linear Performance*



12 Years Product
Warranty on Materials
and Workmanship*

21.29%
Maximum Efficiency

0~+5W
Power Tolerance



PRODUCT KEY FEATURES



Better Output In Low Irradiance.
Higher power output even under low-light
environments like on cloudy or foggy days.



Split junction box improve heat dissipation.
Best in class thermal coefficients.



Better Temperature Coefficient
Higher power generation under higher
ambient temperature conditions



Up to 30% Additional Power Gain when
compared with conventional P-type module.



MBB Half-Cell Technology provides
Better Performance under Partial Shading.



100% High Voltage Testing to Ensure Safety.

THE INDUSTRY'S BENCHMARK

Jeem Solar is an internationally renowned leading solar energy cost effective befitting solutions provider having core competency in high efficiency PV module manufacturing and providing wide range EPC solutions. Our PV modules are the best in class in terms of power output and long-term reliability.

PRODUCT CERTIFICATES



ALMM BIS IEC



R-72013773
BIS Qualification



IS/IEC 61215
Design Qualification



IS/IEC 61790-1/2
Safety Qualification



Better Performance



ISO 9001:2015
Certified Mfg. Process



ISO 14000
Environmental Mgt. System



Insured by Axiata



Split type - JB



Better Performance

MADE IN INDIA

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC)

(irradiance of 1000 W/m², spectrum AM 1.5G and cell temperature of 25°C.)

Model Number	JE-10MB-MF144-530	JE-10MB-MF144-535	JE-10MB-MF144-540	JE-10MB-MF144-545	JE-10MB-MF144-550
Nominal Maximum Power	530 W	535 W	540 W	545 W	550 W
Optimum Operation Voltage (V _{mp})	43.42 V	43.43 V	43.45 V	43.50 V	43.56 V
Optimum Operation Current (I _{mp})	12.21 A	12.32 A	12.43 A	12.53 A	12.64 A
Open Circuit Voltage (V _{oc})	49.52 V	49.53 V	49.54 V	49.56 V	49.6 V
Short Circuit Current (I _{sc})	13.18 A	13.30 A	13.43 A	13.54 A	13.65 A
Module Efficiency (%)	20.51	20.71	20.9	21.09	21.29
Power Tolerance	0 ~ 5 W	0 ~ 5 W	0 ~ 5 W	0 ~ 5 W	0 ~ 5 WW

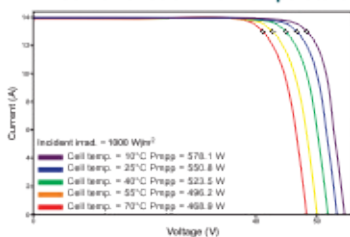
Note: Power Measurement uncertainty: < ±3%

PERFORMANCE UNDER NOCT

(NOCT = 45.25°C irradiance of 800 W/m², ambient temperature of 20°C and Wind speed 1 m/s)

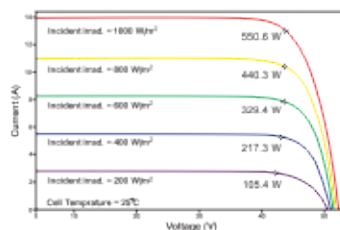
	400 W	403 W	407 W	410 W	414 W
Maximum Power (P _{max})	400 W	403 W	407 W	410 W	414 W
Optimum Operating Voltage (V _{mp})	39.3 V	39.5 V	39.7 V	39.9 V	40.1 V
Optimum Operating Current (I _{mp})	10.17 A	10.21 A	10.26 A	10.29 A	10.34 A
Open Circuit Voltage (V _{oc})	47 V	47.2 V	47.4 V	47.6 V	47.8 V
Short Circuit Current (I _{sc})	10.78 A	10.82 A	10.86 A	10.9 A	10.94 A
Temperature	45±2 °C				

IV Curve Variation with Temperature

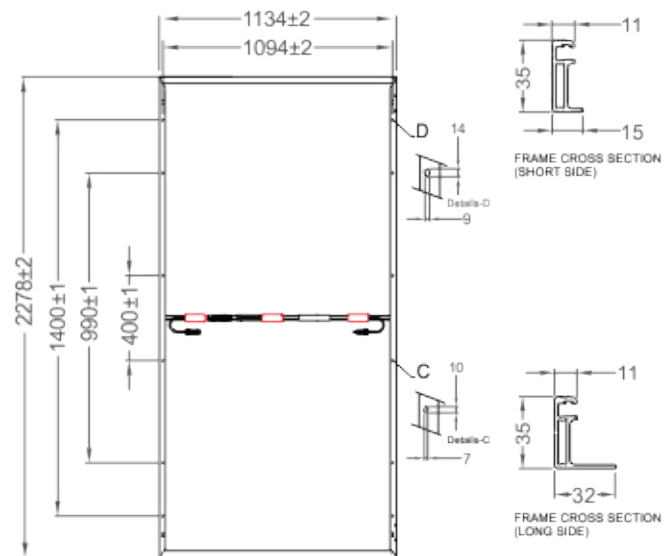


IV Curves for Front-Side Illumination of 550 Wp Panel

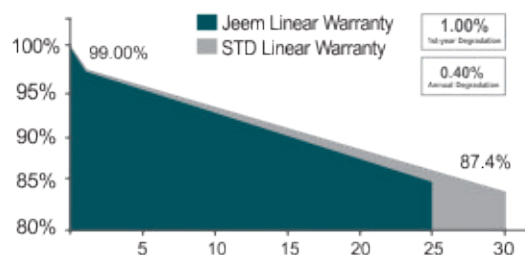
IV Curve Variation with Irradiance



REAR VIEW & MOUNTING DETAIL



All Dimensions are in mm; Tolerance: ±2mm



MECHANICAL SPECIFICATIONS

Dimensions (L x W x T in mm)	2278 x 1134 x 35
Weight(kg)	28.6
Cell type / No Of Cell	144 Half-cut Mono PERC Solar cells
Frame	Anodized Aluminum Alloy (6005, Temper T6, silver colour)
Front Cover	ARC coated Low Iron Tempered Glass (3.2 mm thick)
Encapsulate	Ethylene Vinly Acetate (EVA) Sheet - PID resistant and UV resistant
Back Cover	Fluoro-polymer Backsheet (white colour)
Junction Box	Split Junction Box (3 nos. with individual Bypass Diode) - Weatherproof (IP68)
Bypass Diode	40 A, 45 V, 200 °C max. junction temperature
Cable	4 sq. mm, 300 mm length (Customised cable length available on request)
Connectors	MC4 compatible (MC4 original available on request)
Application Class Rating	Class A
Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa-Front; 2400 Pa-Back
Mounting Holes Pitch (Y)-mm	[A] 1400, [B] 990, [C] 400
Mounting Holes Pitch (X)-mm	1095

TEMPERATURE COEFFICIENTS

Current α (I _{sc}) :	0.0297%/°C
Voltage β (V _{oc}) :	-0.2470%/°C
Power γ (P _{max}) :	-0.2303%/°C

STACKING STANDARD 20FT 40FT

No. of Modules per Container:	140	560
No. of Pallets per Container:	05	20
No. of Modules per Pallet/Weight:	28 Nos/820 Kg	
Pallet Dimensions in mm :	2285(L)*1000(W)*1275(H)	

MAXIMUM OPERATING CONDITIONS

Operating Temperature:	-40°C to +85°C
Maximum System Voltage:	1500V
Maximum Series Fuse Rating:	25 A

Caution: Please read safety and installation instructions before using the product. ***Warranty:** Linear performance warranty for 30 years, with degradation up to 2% in 1st year and 0.6 %/year from year 2 to year 30. Please read JEEM warranty documents thoroughly. **Disclaimer:** Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. Jeem Energy Pvt. Ltd. reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.

PRESENCE IN INDIA



Solar bring the smile...



JEEM ENERGY PVT. LTD.

Reg. Office : Shop No. 14, 2nd Floor,
Shayona BIPL City Center, ST Bus Port,
Dhebar Road, Rajkot-360 001. (Gujarat).

Factory : Plot No.1 to 4, Survey No. 211,
Ukerda Neknam Road, Near Ramdoot Alloy,
At. Moviya, Paddhari, Rajkot-360 110. (Gujarat).

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✉ contact@jeemenergy.in

🌐 www.jeemenergy.com