

BSE SME
STOCK CODE : 543620

ALMM
BIS

IMA
SOLAR



TOGETHER WE SHINE

OFFICIAL SOLAR PARTNER

THE GAME GOES BIGGER!



INSOLATION ENERGY LTD.

IMAGINING & INNOVATING A GREEN WORLD!



**INA
SOLAR**

**TOGETHER
WE SHINE!**

Insolation Energy Ltd. branded as "INA Solar" is a BSE SME listed company, India's leading manufacturer of High-Performance Solar Panels, Batteries & PCU's.

With a rich history of more than 7 years of its successful operation and two state-of-the-art manufacturing facilities, INA Solar is steadfastly committed to excellence, and the creation of affordable, top-quality solar product to foster the adoption of clean energy solutions.

INA Solar has secured the 1st position among BSE SME and NSE emerge board of listed companies in India, and ranks 757th among the top 1000 companies in India by market capitalization, valued at Rs. 3412.07 Cr. as of March 31, 2024, according to the SEBI Business Responsibility & Sustainability Report (BRSR).

CURRENT MANUFACTURING CAPACITY

950 MW

PROJECTED CAPACITY BY 2024

3 GW

Solar Panel Manufacturing

PROJECTED CAPACITY BY 2025-26

1.2 GW

Solar Cell Manufacturing

END TO END SERVICES

EPC Engineering
Procurement &
Commissioning
Roof-Top & Ground Mounted

PRESENCE IN

100+
Districts

BUSINESS NETWORK

300+
Distributors & Dealers

CONSUMER CONNECT

10,000+
Happy Customers

SERVICE PORTFOLIO

500+
Projects Delivered

TRUST & CERTIFICATION

**ALMM
BIS** 
Best Quality & Standards

**BRAND
PARTNERSHIP**



Insolation Energy Limited (INA Solar) has partnered with the illustrious Team- Lucknow Super Giants as their "Official Solar Partner" for the T20-season 2024 to promote the use of Solar Energy to a much larger pool of audience.

With this collaboration with Lucknow Super Giants, INA Solar is all fired up towards achieving one of the company's core objectives- "To expand the Renewable Energy landscape of the country by making judicious, eco-friendly strides towards large-scale adoption of Solar Power".

SOLAR PV MODULES

INNOVATION ENGINEERING!

Insolation Energy Ltd. is one of the leading Solar Companies in India reckoned for Top Quality PV Module manufacturing that is super efficient even in low light conditions. We produce a range of High efficiency Solar PV modules including Poly/MonoPERC/TOPCon ranging from 40Wp-600Wp.

Some of our quality products include Half Cut, Dual glass (Glass to Glass), BIPV, Poly, Monofacial/Bifacial, TOPCon modules. Each Solar PV module passes through stringent quality tests and meets the Indian as well as international standards. Our Made in India Solar Panels are ALMM approved and are certified by BIS, UL, NISE, CE, etc.

PV MODULES (40WP- 600WP)

POLY/MONOPERC/TOPCON CELL TECHNOLOGY FOR SOLAR PANELS



FEATURES:

- Superior module efficiency as per international benchmarks.
- Positive power tolerance.
- 25 years linear performance warranty for Poly/MonoPERC.
- 30 years linear performance warranty for MonoPERC/TOPCon.
- PID free modules with long term reliability.
- Glass with anti-reflective coating improves light transmission.
 - * Salt mist, Ammonia, blowing sand and hail resistant passed
 - * Excellent energy generation in weak light.
- Sustain heavy wind & snow loads (2400 pa & 5400 pa).
- Double stage EL tested pre & post lamination.
- IP 68 junction box with extended cable.

Technical Data

Electrical Data : All Data refers to STC (1000W/m² AM1.5G, 25C°

STC : 1000W/m irradiance, 25C cell temperature, AM1.5G spectrum according to EN 60904-3
Average relative efficiency reduction of <5% at 200W/m² according to EN 60904-1

Type	Sapphire Series (Poly)						Ruby Series [Mono PERC]			
	INA36P 40	INA36P 50	INA36P 75	INA36P 100	INA36P 170	INA72P 335/12V	INA72P 335	INA32MP180	INA36MP200	INA72MP395
Peak Power Pmax (Wp)	40	50	75	100	170	335	335	180.00	200.00	400.00
Maximum Voltage Vmpp (V)	18.2	18.2	18	18.1	18.9	19.15	39	19.36	20.6	49.4
Maximum Current Imp (A)	2.25	2.8	4.17	5.52	9.01	17.49	8.6	9.31	9.72	10.47
Open Circuit Voltage Voc (V)	21	21.4	22	22.1	22.7	23.5	46.15	23.9	24.9	40.8
Short Circuit Current Isc (A)	2.75	3.3	4.67	6.11	9.33	18.09	9.09	9.77	10.31	9.81
Module Efficiency (%)	13.88	13.82	14.26	14.78	17	17.35	17.26	16.48	20.05	20.06
Length x Width x Height (mm)	415X670X34	505X670X34	705X670X34	905X670X34	1495X670X35	1960X990X35		1335X670X35	1495X670X35	1985X1000X35

Type	Diamond Series [Mono PERC]					Platinum Series [TOPCon]		
	INA-144MHC -WF-540	INA-144MHC -WF-545	INA-144MHC -WF-550	INA-144MHC -WF-555	INA-144MHC -WF-560	INA-144THC-WF-580	INA-144THC-WF-590	INA-144THC-WF-600
Peak Power Pmax (Wp)	540	545	550	555	560	580	590	600
Maximum Voltage Vmpp (V)	41.81	41.90	41.93	42.05	41.77	43.52	44.05	44.68
Maximum Current Imp (A)	12.92	13.02	13.12	13.20	13.41	13.33	13.38	13.43
Open Circuit Voltage Voc (V)	49.81	49.76	49.90	50.01	50.45	51.19	51.24	51.19
Short Circuit Current Isc (A)	13.51	13.90	13.98	14.05	14.15	14.06	14.26	14.46
Module Efficiency (%)	20.92	21.12	21.29	21.48	21.98	22.45	22.84	23.22
Length x Width x Height (mm)	2278 x 1134 x 35					2278 x 1134 x 35		

**SOLAR
BATTERY**

**ENERGY ON
DEMAND!**

**TALL TABULAR
SOLAR BATTERY**
(40, 160, 180, 230 Ah)



Speaking of Innovation, INA Solar Batteries are C10 rated deep cycle batteries, designed specifically for solar applications. These batteries are engineered to withstand the demands of fluctuating solar energy systems. With quality being the matter of paramount importance, INA Solar ensures that their solar batteries undergo rigorous quality checks & meet all standards. The tubular plates in these batteries are thicker than the standard plates. This design choice contributes to better performance, longer backup, and extended battery life. INA Solar Batteries are tailor-made for solar power systems. They are optimized to store energy generated by solar panels during the day. Additionally, they can be charged through the grid when solar power is unavailable. INA offers Tall Tubular Lead Acid Batteries, which are widely recognized as reliable and successful across various solar applications.

Model	INAS401236	INAS1601236	INAS1801236	INAS2301236
Battery type	Tubular Lead Acid	Tubular Lead Acid	Tubular Lead Acid	Tubular Lead Acid
Battery Rating	12V, 40Ah@C10	12V, 160Ah@C10	12V, 180Ah@C10	12V, 230Ah@C10
Warranty	36 Months	36 Months	36 Months	36 Months
Nominal Voltage	12	12	12	12
Standard to which Battery is made	IS 13369:1992	IS 13369:1992	IS 13369:1992	IS 13369:1992
Dimension (L x W x H) ± 5mm	410 x 172 x 265	505 x 190 x 412	505 x 190 x 412	505 x 190 x 412
Net Dry Weight of battery (Kg)	11 Kg(± 3%)	30 Kg(±3%)	32.50 Kg(± 3%)	36.00 Kg(±3%)
Battery Container	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Type of Postive Plate	Tubular	Tubular	Tubular	Tubular
Type of Negative Plate	Flate pasted	Flate pasted	Flate pasted	Flate pasted
Terminals	Lead Antimony alloy	Lead Antimony alloy	Lead Antimony alloy	Lead Antimony alloy
Material of seperator	PE	PE	PE	PE
Electrolyte	Sulphuric Acid	Sulphuric Acid	Sulphuric Acid	Sulphuric Acid
Net Charge battery weight	21 Kg(±3%)	53Kg(±3%)	56 Kg(±3%)	61 Kg(±3%)
Net Gross Battery weight	22.5 Kg (±3%)	55 Kg (±3%)	58 Kg (±3%)	62.50 Kg(±3%)

**SOLAR
PCU**

**INTELLIGENT
POWER CONTROL!**

PCU
(440VA-10,000 VA)



A Solar Power Conditioning Unit (PCU), also known as a Solar Inverter, plays a crucial role in solar energy setups. INA Solar PCU manages the flow of energy between various components in solar systems. Its primary tasks include converting direct current (DC) from solar panels into alternating current (AC) for household usage and battery charging. During the daytime, our PCU's prioritize battery charging. It draws energy from both the grid and solar panels to charge the batteries. At night, it utilizes the stored energy from the battery to power electronic appliances. Unlike standard solar inverters, which simultaneously charge appliances and batteries during the day, a PCU focuses on battery charging first.

PWM SOLAR PCU		INA SUPS - 440P12	INA SUPS - 1150P12	INA SUPS - 2500P24
Input	Main wide ups mode voltage range	90 ~ 300 ± 10 VAC	90 ~ 295 ± 10 VAC	90 ~ 295 ± 10 VAC
	Main ups mode voltage range	180 ~ 265 ± 10 VAC	180 ~ 265 ± 10 VAC	180 ~ 265 ± 10 VAC
	Rated voltage (backup mode)	220 VAC ±10%	230 VAC ±10%	230 VAC ±10%
Output	Max input solar pv (v)	21 V	21 V	50V
	Max pv watt wp	150 Wp	800 Wp	1600 Wp
	Voltage (voc)	19~21 V	19~25 V	38 ~ 50
Solar	Voltage (vmp)	17 V	17-19 V	34 ~ 39
	Max pv charging current (a)	9A	50 A	50 A
	Capacity	40Ah - 100 Ah	40Ah-250Ah	100Ah-250Ah
Settable options	Battery charging current (mains mode) (a) (on/off switch any position)	8 A (default) / 6 AMPS	20/15(DEFAULT)/10/5/0 AMPS	20/15(DEFAULT)/10/5/0 AMPS
	Ups/wups mode selection (on/off Switch any position)	WUPS(default) 90V TO 300V	WUPS(default) 90V TO 295V	WUPS(default) 90V TO 295V
	Priority selection (on/off switch any Position)	Grid(default)/Solar/User1/User2/Normal	Grid(default)/Solar/User1/User2/Normal	Grid(default)/SOLAR/User1/User2/Normal
	Battery type selection (on/off switch On position only)	Tubular(default)/LA/Li-ion	Tubular(default)/LA/Li-ion	Tubular(default)/LA/Li-ion
	Battery low setting per battery (on/off switch off position only)	11/10.8 /10.5(based on load)	11/10.8/10.5(default) V	11/10.8/10.5(default)V

MANUFACTURING

EARNED SUPREMACY!

INA Solar stands out in India's solar industry with its extensive range of Solar PV Modules, ranging from 40Wp to 600Wp. Our commitment to excellence drives us to deliver expansive and high-performance products, crafted in our fully automated, state-of-the-art manufacturing facility. INA Solar sets itself apart by integrating robotics, implementing rigorous quality checks, utilizing superior raw materials, and employing a highly skilled workforce. With cutting-edge production planning and motion control technology integration, we achieve optimal output rates. Our unwavering dedication to innovation and perfection guarantees that each module meets the highest standards of quality and performance.

MADE IN INDIA!

INDIAN AT HEART, GLOBAL IN SPIRIT!

- ☀️ PM KUSUM SCHEME A/B/C
- ☀️ JAL JEEVAN MISSION
- ☀️ PM SURYA GHAR MUFT BIJLI YOJANA

We take immense pride in manufacturing our products in India while adhering to the world-class standards of quality; leveraging cutting-edge technology. Our products make it the largest Industrial, Commercial, Agricultural & Residential Solar Projects in India and adhere to all the Govt. Standards & Schemes.

ACCREDITATIONS

IMPRINT OF TRUST!



UL Certified



ISO Certified



CE Certified



ALMM Approved



BIS Certified

Our solar panels are crafted to uphold world class standards, gaining accreditations from all National and International Certification bodies that validate our commitment to quality, sustainability and manufacturing high performance solar panels.

TESTING

RIGOROUS QUALITY CHECKS!

Our in-house solar panel testing is characterized by stringent quality checks and exhaustive performance evaluations. Every product assessment is structured to align with international testing standards, delivering unparalleled quality and robustness in our products.

AWARDS

THE VALIDATION OF EXCELLENCE!



Excellence in Renewable Energy- Solar
By CRESPIA at IIT Delhi, Green Globe Awards - 2023



Excellence in Solar Panel Manufacturing
By ET Leadership Excellence Award - 2023



Distinguished Entrepreneur Award
In MSME Category By PHDCCI - 2022



Excellence in Solar Panel Manufacturing By
Radio City Business Titans Award, Dubai - 2022



AMONGST **TOP 10** SOLAR COMPANIES IN INDIA!

Source: As per ALMM list as published on 24.02.2024

INSOLATION ENERGY LTD.

Factory (A) : Near Daulatpura Toll Tax, Jaipur-Delhi Bypass, Village Bagwada, Jaipur.-303805

INSOLATION GREEN ENERGY PVT. LTD.

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