

Energy Automation Products & Research Organization





The Popular DSP-Sine Wave Inverter Technology invented in year 2002 by

Mr. Jagdeep Chauhan - MD (Eapro Global Limited)

Patents Granted - 5

Patents Applied - 4

His Belief -

"The Technology WINS the RACE"

Company Overview:

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Inception - 2012.

Present Team - 500+.

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Manufacturing plants - 5.
 (Capacity- more than 50,000 Inverters/ month).

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- In - house R&D with 50+ Technocrats.

Global Presence - 20+ Countries.



ODM for most of the reputed brands.



- Domestic & Export Dealer/Distributor Network - 2000.



- Trusted technology - Over 10 million satisfied users globally.

Vision:

To be World's No.1 brand in Solar Inverter Technology by providing best Solar Solution to Society with help of continuous Research & Innovation.

Mission:

- To be India's No.1 Solar Solution Provider Company.
- To be among India's Top 10 Organization in Best Employer Category.
- To be India's No.1 company in Customer Satisfaction in Solar Segment.

Values:

Integrity in EAPRO is different than always being right or always making the right calls, we believe its being honest, having a strong moral compass and understanding.

Accountability is a belief within the employees of making sure its not just about delivering a perfect product but also delivering an individual faith to the customers for the product delivered.

Awards & Recognition

- Awarded as best company in innovation of ON GRID HYBRID inverter at sigma summit (International solar Alliance) on 30th Jan2019 in New Delhi.
- Recognized by Silicon India 10 most promising original design Manufacturers 2019.

Certifications





Who we are

Energy Automation Products & Research Organization, popularly known as EAPRO was established in 2012 with a mission to bring futuristic, ECO-friendly products to the people at affordable cost. Today EAPRO is one of the most innovative organizations of India in production of Solar Power Generating System Products.

Our Core Strength:



World Class Research & Development

Our Research & Development Center comprises of highly experienced and qualified technocrats, who works on new revolutions, keeping an eye on the recent advancements in the technology and ever changing market needs. The technologies used in products are provided by our R&D center and are the back bone of EAPRO.

Specialized Manufacturing

We are the leading manufacturer of solar power generating system. We have 5 different plants in Roorkee, Uttarakhand to cater the customized manufacturing as per the customer's wish list.





Ensured Quality

With a strong vision & dedicated organization mission, we deliver the best in class quality products. We implement 5S & Quality Management System based on ISO – 9001 standards to maintain a professional standard of working. The organization is integrated with quality in all spheres of its activities to ensure that the quality of its products provide the customer with continued satisfaction.

Area of Diversification:

- On-Grid Hybrid System.
- Battery Management System (BMS)
- Home Automation & Intelligent Surveillance System





Jagdeep Chauhan Founder & Managing Director

Mr. Chauhan is a Young and Energetic Electronic graduate Engineer (Amravati University, Maharashtra) who invented the **DSP Sine-Wave Inverter Technology in 2002** after which **INDIA became WORLD LEADER** in production of power backup inverters.

With over 25 years of experience (including 5 granted and 4 applied patents) in Power Electronics development and business management, he is well utilizing his spiritual and intellectual energy to enhance the team's motivational levels which runs the company effectively.

His Belief - "The Technology WINS the RACE"

His mission is to bring futuristic, ECO- friendly solar products to the people at affordable cost. Today, EAPRO is one of the most innovative organisations globally in production of Energy Automation Products & Solar Power Generating Systems.



Abhilasha Singh Director

Strongly believes that people & process are the main constituent for maintaining product quality. Consistent effort in people building apart from implementing quality process and management process in each and every department.

Awards & Recognitions



Startup to Unicorn award for his commendable contribution in Solar Power Generating System Innovations by Honourable Cabinet Minister Sh. Piyush Goyal Ji on the platform organised by Zee Media in New Delhi (Nov, 2021).



Building New Uttarakhand contributor award by Honourable Chief Minister Uttrakhand Sh. Pushkar Singh Dhami Ji for commendable contribution in Solar Power Innovation and Employment opportunities in Uttarakhand (Dec, 2021).



Asia Pacific Most Promising Entrepreneurship Award - 2010 (APEA, Singapore.)



Outstanding Contribution award in the field of Power electronics at "Global Business Opportunities & Latest Trends in Solar Energy" Programme by MSME, Jaipur (Oct, 2018)



Best company Award in Innovation of ON GRID HYBRID inverter at Sigma Summit (International Solar Alliance) -Jan, 2019 New Delhi.



Silicon India 10 Most Promising Original Design Manufacturers, 2019 award for high quality, efficient & reliable ODM services



Manufacturing Capacity involves 5 different units



The Mother Plant of Inverter Manufacturing

With a strength of more than 200 skilled manpower, we have a Inverter manufacturing facility of producing 50,000 power back up, solar, hybrid inverters per month ranging from 250 VA to 50 KVA. With 6 number of well equipped manufacturing lines following the processes like Fitting, Transformer fitting, Power Card fitment, Wiring, Display & Bazel fitting, connections followed by all the visual and quality inspections.

Cabinet Designing and manufacturing

Quality mechanical systems, a setup for manufacturing in house cabinet for all capacities of inverters and AC stabilizers, produces 1000 cabinets per with well equipped machinery setup of Shearing, Power Press, CNC Bending, Milling, Lathe, Surface Grinder, Spot Welding and Powder Coating Machines. With a manpower strength of more than 20 technicians, QMS follows all standard processes to manufacture long life and best quality cabinets.



Transformer Division

Ateam of 20 skilled manpower produces 1000 transformers per day following all the basic processes like Bobbin manufacturing, Primary & Secondary winding, Core Filling, Testings, Oven process and final quality inspections to produce all capacities of transformers. Our in house manufactured transformers matches best with our Inverters.

Printed Circuit Board (PCB) Manufacturing

In house Surface Mounting Machine and Skilled Manpower working with quality standards raises our production capacity of Power Cards to 3000 per day. With 8 skilled and trained technicians operating the Surface Mounting Machine produces 3000 cards per day following the processes like Solder pasting, CNC Programmed chip mounting followed by visual inspections to manufacture cent percent flawless product. Manual mounting of components followed by WSM Soldering machine and testing/tuning of power cards is done by trained manpower.





Solar Panel Manufacturing

We are taking photovoltaic manufacturing as one of our core industries. We are engaged in production and sales of PV modules. As a complete solar solution provider, we have a complete range of PV modules ranging from 40W to 335W. With a skilled manpower of 15 technicians, we are in a capacity to produce 35MW/annum.

Business Divisions

Technology Consultancy

We provide Technology Consultancy to most of the reputed brands globally through our world class Research & Development Center.

ODM - Original Design Manufacturer

We design our products, validate them and do field testing for providing best in class technology and trusted products with multiple design options. We have well defined ODM division and special service plans for ODM partners including onsite service and well equipped training centre for imparting product & technical training.

Channel Sales

We endeavor to partner our patrons and customers in their journeys of exploration. Our main objective is to provide an immersive brand and retail experience in addition to ensuring a superior product experience. Our dealers and distributor network teams are our extended partners in this task. We have strong & well established above 2000 channel partners network.

Export

We being a Technology driven organization provides customized solutions to the clients globally as per their requirements. This helped EAPRO tremendously in growing across the Globe & establishing long term relation & trust amongst its core clients world wide.



•	China
©	Dubai
•	Egypt
©	Japan
•	Jamaica
©	Kenya
•	Lebanon
©	Nepal
•	Nigeria
©	Singapore
•	Tanzania
©	U.A.E.
•	Uganda
©	U.S.A.
•	Yemen





- Smart Solar Selection with three different Saving Level Zones.
- User Selectable Critical Parameter Settings.
- Remote Monitoring & Controlling through Wi-Fi/LAN/GSM/GPRS/Android App (Optional)
- Provision to maintain the Battery gravity charging at 90V (Low Mains).
- Incorporating all the features of conventional Sine Wave Inverter.

Specifications

650VA, 850VA, 1000VA, 1450VA, 2000VA
12V / 24V
PWM
50A/12V / 50A/24V
800Wp / 1600Wp
650VA, 850VA, 1000VA / 1450VA, 2000VA
23V / 46V
14.5V -18V / 29V - 36V
14.4V (Default setting)
10.6V (Default setting)
18A / 20A (Default setting)
40A (Default setting)
330*325*185 mm (Net Weight 10.35 Kg) 405*370*260 mm (Net Weight 16.96 Kg)
Flat,Tubular, VRLA(SMF)



- More reliable & efficient single card solution.
- New generation power devices capable to handle high surge current.
- Interactive multi colour big graphical display.
- Closed loop Auto Sensing Software Control (ASSC)
 smart Battery Charging Technology for longer battery life.
- Remote Monitoring & Controlling of PCU through
 Wi-Fi/LAN/GPRS/Android App (Optional).

Specifications

Capacity (KVA)	10KVA/ 120V,10KVA/ 180V,15KVA/ 240V,20KVA/ 360V, 30KVA/ 360V,40KVA/ 360V,			
No Load Battery Current (NLC)	2.0+/-0.2A			
O/P Voltage at No Load	240+/-1%			
O/P Voltage at full Load	240+/-1%			
Overload Retry	6 Times			
Overload Limit each Phase on Load	105% ~105 Sec. / 125% ~36 Sec. / 150% ~22 Sec. / 200% ~15 Sec.			
Output Frequency (Inverter Mode)	50.0 +/- 1 Hz			
Mains Low Cut	180+/-5V			
Recovery	190+/-5V			
Mains High Cut	280+/-5V			
Recovery	270+/-5V			
Overload Indication	105-150% Buzzer beep after every 30Sec for 5sec >150% Continuous Buzzer beep			
Change Over Time	Mains to Inv 30 s, Inv. to Mains - <10ms, Max. Charging Current - 10+/-2A, Boost Charging Voltage - 14.2+/-0.2V/Batt.			





- Multi Channel Interleaved MPPT Technology with Tracking efficiency- 99.5%.
- More efficient and high reliable.
- Smart Solar Selection for max. utilization of Solar Power.
- Remote Monitoring & Controlling of the Solar PCU through WI-FI/LAN/GPRS (Optional).

Available in:

3 KW-48V, 4 KW-96V, 6 KW-120V,

8 KW-120V, 10 KW-180V, 12 KW-240V.

Specifications

Mains AC Lower Voltage Limit	100 <u>+</u> 5 VAC
Mains AC Lower Recovery Volt.	110 <u>+</u> 5 VAC
Mains AC Higher Voltage Limit	280 <u>+</u> 5 VAC
Mains AC Higher Recovery Volt.	270 <u>+</u> 5 VAC
Battery Low Cut-Off Voltage (Settable)	10.6 <u>+</u> 0.2 V (per Batt.) Default
Mains o/p Frequency	Same as Input
UPS o/p Frequency	50 <u>+</u> 1.0 Hz
Charge Controller Type	MPPT based
Input Current per Channel (Max. Imp)	As per model
Solar Batt. Low Cut Voltage (Adjustable)	11.5V (Default)
PV Reverse Polarity Protection	Available
Reverse Current flow to PV Protection	Available
Trickle Charging Current Limit	0.5 <u>+</u> 0.3A
Boost Voltage (settable)	14.4 <u>+</u> 0.1 V (per Batt.) (default)
Float Voltage	13.6 <u>+</u> 0.2 V (per Batt.)
Overload	100 + 3% (with Auto reset function
Short Circuit Protection	> 300% Load (with manual reset function)

POWER BOOSTED HOME UPS



		EGSINE1500			
Model	EGSINE1100	EGSINE1700			
Capacity (VA)	925 VA	1450 VA			
Nominal battery voltage (VDC)	12 V				
Battery boost voltage (Per Battery)	14.4 V (Default)				
Battery Low Cut (Per Battery)	10.7 (Default)				
Built in automatic stabilizer	Yes				
Grid charging current (HC)	17±1A 18±1A		26±1A		
Output waveform	Pure Sine Wave				
Grid input Range	90V to 290V				
Display Type	User Friendly LED Display				
Weight	8.710 Kg	9.640 Kg	10.470 Kg		
Dimensions (LxWxH) in mm	266 x 277 x 111	266 x 277 x 111	268 x 277 x 111		
Protection Class	IP20				
Standards	IS 16242 (Part 1): 2014/IEC62040-1:2008				

^{*}Supported Battery Types - Tubular, VRLA (SMF)









POWER SAVING INDUSTRIAL UPS



Model	FGSINF2500	EGSINE3500	FGSINF4500	EGSINE6000	EGSINE12000
Capacity (VA)	2200 VA	3000 VA	3500 VA	5625 VA	10000 VA
Nominal battery voltage (VDC)	24 V		36 V	48 V	96 V
Battery boost voltage (Per Batt.)	14.4 V (Default)				
Battery Low Cut (Per Batt.)	10.7 (Default)				
Remote monitoring	Yes				
Power saver in Grid mode	Yes				
Grid charging current (HC)	20±1A	24±1A	20±1A	24±1A	20±1A
Output waveform	Pure Sine Wave				
Grid input Range	100V to 280V				
Display Type	User Friendly Graphic LED Display				
Weight	15.130 Kg	17.200 Kg	28.580 Kg	36.780 Kg	63.200 Kg
Dimensions (LxWxH) in mm	316x276x159	318x276x159	313x276x376	364x276x417	438x276x435
Protection Class	IP20				
Standards	IS 16242 (Part 1): 2014/IEC62040-1:2008				

^{*}Supported Battery Types - Flat, Tubular, VRLA (SMF)













- Specially Designed for off Grid & Grid Tie Solar Solution.
- High performance Modules with efficiency over 18%.
- Excellent energy generation in weak light.
- 0-+5% power output.
- PID free module, Anti-PID cell technology.
- Wind load of up to 2400 pa and heavy snow load of up to 5400 pa.

Available Models 105W to 330W

Electrical Characterstics @25°C					
Max Power (Pmax.)-WP	105	170	270	330	
Voltage at Max. Power (Vpm)	17	19.31	31.71	37.5	
Current at Max. Power (Imp)	6.2	8.8	8.53	8.81	
Open Circuit Voltage (Voc)	21	23.2	38.81	46.2	
Short Circuit Current (Isc)	6.30	9.3	9.1	9.38	
Maximum System Voltage Volts	1000	1000	1000	1000	
Physical Parameter					
No. of Cells	32	36	60	72	
Module Dimension (mm)	1026x666x34	1486x666x34	1651x991x35	1966x991x36	

Product Description



Advantages

- · Quick charging.
- Suitable for frequent power-cuts.
- Tubular designed plates provides longer life.
- Designed for Solar & Non-Solar application.
- Eco-friendly aqua trap vent plugs to ensure no acid fumes.

- Extra Power Saving.
- Longer Cycle Life.
- Low Maintenance.
- Extra Backup.
- Electrolyte contains special additives to get quick recovery from deep discharge.
- Excellent charge acceptance.

Capacity - 120AH, 150AH, 160AH, 170AH, 180AH, 200AH, 220AH



Available Range



Incla's Most Trusted SPGS

EAPRO provides best technology to ensure

Maximum Power Generation & Best Performance.

Advantages of EAPRO SPGS:

- Maximum Utilization of Solar Power.
- · Good Return on Investment.
- · Installation support & Service facilities.
- Best Extended warranty & Maintenance plans.
- Single Point responsibility for entire solution.

RTC MPPT Range - (3KW to 50 KW)

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AC Stabilizer

India's 1st Remote Controlled AC Stabilizer

Energy

Best solution to cut down your Electricity Bill



- · No Load Shutdown.
- Smart Time Delay Function.
- · Sleep Mode Function.
- Input Voltage & Frequency Low & High Cut protection.
- · Over load protection.
- Over temperature protection.

Battery Equalizer



- Appropriate for SMF, GEL, Flat & Tubular Batteries.
- Extends battery life.
- Extends backup time.
- · Easy to install.
- · Reduces battery replacement.

SMU



- Auto Selection of Battery Voltage (12V/24V).
- Solar Current Selection Option (low 30 amp, med - 40 amp & high - 50Amp).
- Two Savings level with Sun Clock Approximation.
- LCD Display.
- Over load protection by Current Transformer.
- Battery mode selection option (Tubular/SMF/Flat).

After Sales Service

Our team of well trained & equipped service experts with well organized customer care department is committed to provide service within 48 hours along with consumer beneficial Extended Warranty plans. We also provide Service plans for ODM.

Our Service Commitments:

- Service within 48 hours.
- Well defined Customer Care Department.
- Best in Class Extended Warranty & Maintenance Plans.
- Installation Service for HKVA Systems.
- Well trained & equipped service team of Qualified Engineers across INDIA.



Our Initiatives:

- World Class Learning & Development.
- Training Center.
- One Stop Solar Solution.
- Installation & Commissioning.
- Complete System Design.



