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Elcomponics Group is over 29 years old company with proven expertise & technical know-how in the field of manufacturing Wire harness & Connector Assemblies, Wires & Cables, LED lighting solutions such as bulbs, tubes, Street Lights, Panel Lights and down lights, Magnetics such as Power transformers, Inductors & Chokes, etc. We are one of the leading exporter for our products to many countries including China, Europe, USA, Philippines, Saudi Arabia, Australia, Latin America, Algeria and Asian countries.

We are in Renewable power business & provide both consultancy as well as services related to Solar PV Energy to our customers in India and abroad. We build complete turnkey solutions for both On-Grid and Off-Grid Solar power plants for our clients. We are registered Channel partner with MNRE, Government of India and also supplying high efficiency solar panels made by AUO Taiwan. We do have strong presence in Japan and putting up multi MW solar power plant in Japan on long term PPA basis.

We also manufacture Solar Pump controllers, Precision Voltage Regulator (PVr), Solar RO system, Solar super converters, Solar Inverters and Solar LED Lanterns etc. under Elcomponics Technologies, which is our group company for high tech electronics products. All of these products are technically way advance than our competitors and employ stable design for reliable performance & energy-efficient solutions. Our manufacturing is conformance to ISO 9001:2008 & ISO 14000 standards and all the testing & QC/QA are carried out as per the stringent international norms to ensure trouble-free experience by our prestigious customers year on year.

Elcomponics, with its pan India presence has eight manufacturing plants in prominent locations such as Noida, Bangalore & Chennai. With more than 1,300 employees worldwide, we have an unrelenting focus on quality, timely delivery, strong Supply Chain and technology in everything that we make or do. We strictly practice and follow ethical values, green environment norms and avoid hazardous substances at every stage of manufacturing...









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ULTIMATE 6K

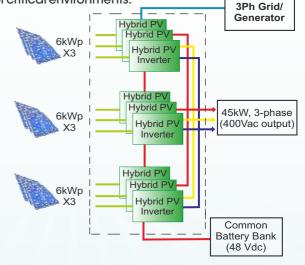
MNRE Approved

True Hybrid Inverter with Grid Feeding capability

Ultimate 6K is solar hybrid inverter with grid feeding (net metering) function. Its unique "all-inone" product design have integrated 2 seperate channels of MPPT charger, DC/AC inverter and AC/DC charger. All are intelligently controlled by DSP for optimum performance.

Ultimate 6K can manage multiple power sources including PV, AC grid, Diesel generator and batteries. Its high efficiency circuitry ensure to deliver premium quality sinusoidal AC at output and it is suitable for operating in any type of critical environments.





- 6 KWp solar input (3 KWp x 2 MPPT channel).
- High power 5KW true hybrid inverter
- 3 different modes of operations Pure Off-grid, Net Metering and Selfconsuming.
- Up to 100A Battery charging current from PV and 50A battery charging from grid.
- Capable of 200% surge power for managing Inductive loads.
- Transfer time <15 msec (Individual Unit).
- Transfer time < 2 sec (In parallel system).
- Wide input AC range up to 300 Vac.
- Pure sine wave output.
- DSP controlled. Fast and precision performance - high efficiency.
- Simple menu-driven operation.
- Parallel function, upto 30kw, 1 Phase or 45kw, 3 Phase possible.

- Same battery sharing in parallel combination.
- LCD display panel for comprehensive real time information.
- Remote Monitoring (optional).
- Internal memory can store up to 1vear data.
- Performance Data can be downloaded on USB stick.
- Can support both Lead Acid and Lithium-Ion battery packs.
- Design for high temperature and humidity environment.
- Wall mounted design.
- Approved for: IEC 61683, IEC 62509, EN 50530, VDE 0126, EN 61000, IEEE 519, IEC 61727, IEC 62116, IEC 62109, IEC 60068, etc.



Pure Sine Wave Solar Hybrid PCU Inbuilt MPPT & Inverter With Isolation Transformer

DHRUV 0.3K, DHRUV 0.5K, DHRUV 1K, DHRUV 2K, DHRUV 3K, DHRUV 4K, Dhruv 4K4







Dhruv series solar PCU provides pure sine wave 1-phase AC power output. It has integrated MPPT solar charger for safe charging of battery using solar power and its high efficiency inverter module is capable to run loads like Light, Fan, TV, Computers, etc on batteries. The combination of MPPT charger, Mosfet based inverter with onboard DSP (digital signal processor) ensures optimum uses of solar energy and its inbuilt isolation transformer (with inverter) provides highly reliable ac output for many years. It is designed with lots of features to maximise saving of utility power bills to customers.

Model Description	Dhruv 0.3K	Dhruv 0.5K	Dhruv 1K	Dhruv 2K	Dhruv 3K	Dhruv 4K	Dhruv 4K4
Max. AC Load (VA)	300	500	1000	2000	3000	4000	4000
System Voltage	12	Vdc	24 Vdc	48 Vdc			
Charging Through Mains	Up to	Up to 10 A Up to 15			Up to 15	A	
No. of MPPT Channels		Single				Dual	
Max Battery Charging Current From PV	20	A		40 A	4		80 A
Max Solar Input Power	300Wp 500Wp		1100Wp	2300Wp			4600Wp
Max Solar open circuit Voltage	47 Vdc 90 Vdc			140 Vdc			
Protections	Overload, Short circuit, Over temperature, Mains Low & High voltage, Panel Reversa Battery Reversal (optional), Lightening (optional)				el Reversal,		

- Pure sine wave inverter output
- 10 to 20% of more energy is harvested by using MPPT solar charger (4K4 have dual MPPT)
- Appliance & UPS Mode
- Intelligent battery charging (4 Stage)
- Indigenous design with proven technology
- LCD display and LED indicators to indicate the instantaneous status of the inverter.
- Automatic solar charging priority
- Incorporated soft start feature
- DSP based intelligent control
- Noiseless operation of fans, lamps and appliances
- Isolated output during inverter mode
- Available in 300 ~ 4000VA power options.
 3K/4K/4K4 model are capable to run 1.5 Ton A/C

SOLAR PUMP CONTROLLER

Advanced solar pump controller designed for low PV input voltage

Neer X₁, Neer X₂, Neer X₃, Neer X₅

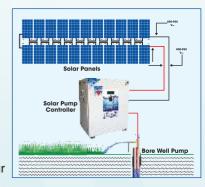


MNRE Approved

DSP based 3-Phase Pure Sine Wave Solar Pump Controller With Inbuilt MPPT and VFD suitable for any 3 Phase pumps up to 5 HP.

Model	NEER X ₅	NEER X ₃	NEER X ₂	NEER X ₁
Power Rating	5 hp	3 hp	2 hp	upto 1.5 hp
Input Voltage Voc	70-160 Vdc	70-160 Vdc	70-160 Vdc	70-160 Vdc
Input Voltage Vmp	60-130 Vdc	60-130 Vdc	60-130 Vdc	60-130 Vdc
Output Voltage	200-440 Vac (3- Phase)	200-440 Vac (3- Phase)	200-440 Vac (3- Phase)	200-440 Vac (3- Phase)
Frequency	20-60 Hz	20-60 Hz	20-60 Hz	20-60 Hz

- Special low voltage MPPT design safe as per WHO.
 - Inbuilt pure copper isolation transformer for longer pump life
- Almost no spikes/surges in pure sine wave outputsupports drawing kilometers long AC cable between controller & pump
- Air cooled (forced convection with fan)
- MC4 connector at DC input
- Operating Temperature upto 55°C
- Pump Control Units Efficiency > 93%
- Suitable for any type of 3- Ph AC pumps/motors.
- Optional manual change over to switch between Solar & Grid input on special request.
- 5-9 hours continuos working as per sun light availability
- No Batteries needed.
- Available for 1hp, 2hp, 3hp & 5hp pumps.
- Can supports pump voltage like 110v and 230v pump on customer need (optional).
- Customization possible on requirement.



SOLAR PUMP CONTROLLER

Economical Solar Pump Controller

NeerX1i, Neer X2i, Neer X3i, NeerX5i, Neer X7.5i, NeerX10i

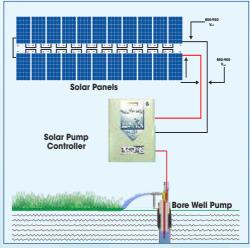


Economical yet powerful DSP based 3-Phase Solar Pump Controller with Inbuilt MPPT and VFD Suitable for Pumps upto 10 HP.



Model	NEER X _{10i}	NEER X _{7.5i}	NEER X _{5i}	NEER X _{3i}	NEER X 2i	NEER X _{1i}
Power Rating	10 hp	7.5 hp	5 hp	3 hp	2 hp	1 hp
Input Voltage Voc	700-850	700-850	570-850	440-670	290-540	220-540
Input Voltage Vmp	580-680	580-680	480-680	360-550	240-440	180-440
Output Voltage	380 Vac (3- Phase)	380 Vac (3- Phase)	380 Vac (3- Phase)	230/380 Vac (3- Phase)	110/230/380 Vac (3- Phase)	110/230/380 Vac (3- Phase)
Frequency	10-60 Hz	10-60 Hz	10-60 Hz	10-60 Hz	10-60 Hz	10-60 Hz

- Nature Air cooling, IP54 enclosure
- MC4 connector for PV input
- Operating Temperature upto 55°C
- → Pump Controller Efficiency > 95%
- Suitable for any type of 3Ph AC pumps/motors
- Optional manual change over to switch between Solar & Grid input
- 5-9 hours continuos working as per sun light availability
- No Batteries needed
- Available for 1hp ~ 10hp 3 Phase, AC pumps
- Best performance / cost ratio in the class
- Remote monitoring solution (optional)



ROSHAN

Solar power packs with inbuilt storage

Roshan G3K, G5K, G10K, 1K1P, 1K1M, 2K2P, 3K3P, 3K3M, 5K3P

- All-in-one solar power kit/ power pack
- Quick and easy installation plug & play
- Silent, clean and economical to operate
- Electricity available day and night even during power outages
- High quality components
- In built batteries

Simple affordable and reliable, very long life





- Utilize your roof top space (residential/industrial) to generate solar power for runing any kind of electrical appliances & earn money using grid feeding (net metering) function for available surplus solar power
- For every 10 Sq mtrs (100 sq feets) of open roof top, generate 1 KW of solar power and have 4~5 units of electricity daily
- Pure Sine wave Smart Hybrid Inverters to get automatic power back up
- ♦ Good for running Air Conditioners (5KVA onward)
- Wide operating temperature range (0° ~ 45° centigrade)
- Compact PV design no hassle of complex wiring in AJBs, MCBs, SPDs etc
- Available in 1-phase and 3-phase AC power output
- Data monitoring at your computer (optional)
- Low maintenance cost for solar Panel up to 25 years
- Available in 1KW~10KW Option
- Customised design possible on request



Lithium - Ion Battery Based Solar Power Pack With Grid Feeding Option

NOOR 3K3, NOOR 5K5

- Easy to carry & install power pack with wheels
- Silent, clean and economical to operate- true 3.3kW and 5kW power solution
- · Built in lithium Ion battery bank & Smart power console
- Grid feeding enable sell surplus PV generation to utility using Noor
- Taiwan design and high quality components

Simple affordable and reliable, extremely long life

NOOR series of solar power packs are having **self consumption inverter technology with grid feeding** (net metering) function. It is interactive & complementary to the utility's power grid and measures load demand as well as available solar power (PV) to decide optimum amount of power supply being used from grid to run connected load (mains + emergency). It mixes both the source (grid + PV) to run connected loads and also to charge batteries for emergency applications. In case of power cut (i.e. grid failure), NOOR automatically act as independent power supply to run emergency loads without consuming batteries for running mains loads. This is special battery management feature of NOOR due to its smart power console. In case load consumption are less then the available PV generation, then NOOR feeds surplus power back to the grid and acts as net metering solution...



- Latest self consumption inverter technology with grid feeding (net metering)
- Built-in smart power console for intelligent power balance battery backup to emergency load only for optimum battery use
- Built-in Lithium-lon battery bank for one hour full load backup-optional expandable battery bank (up to 20kWhO possible
- Pure sine wave AC power output, intelligent control and perfect protection inbuilt
- ♦ Iconic display with graphic LCD- easy to monitor energy flow
- Selectable scenarios for sophisticated energy applications
- Special capacitors modular design for longer inverter life span
- \diamond Monitor power information and system setting on computer using special software
- ♦ Available in 3.3 KW & 5 Kw optional.

ELCOOL

SOLAR DEEP FREEZER



- Proved for solar/battery applications
- Made in India
- ♦ CFC-free (R-134a) based design
- No need of AC power/fuel to run, low cost operation
- Proved for solar/battery applications
- Silent operation

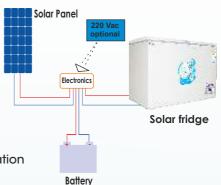
Key Features

Features	Display	Protection
 Environment friendly-run with solar power High efficiency & low power consumption Temperature fully programmable Run on dual power- Solar & battery Optional AC adaptor on request 	 ◆ User friendly display ◆ Digital temperature display 	 ♦ Wrong polarity protection for compressor ♦ Automatic low battery voltage disconnection and reconnection ♦ Automatic thermal cutoff/cutin

- Available in 100L ~300L model
- Customised design possible on request

Key Benefits

- Ideal for unstable grid conditions
- Highly efficient MPPT solar charger
- Easy temperature setting & control
- Compressor speed control
- Pure Copper evaporator coil long life



SOLAR RO SYSTEM

Clean Water - Healthy Life



Solar RO System from Elcomponics is state-of-the art innovation in water purification technology ro get safe drinking water. These energy-efficient solution are result of our expertise in solar power domain and extensive research on reverse osmosis system designing. Elcomponics Solar RO system have modular designs which is suitable for indoor as well as outdoor installation and are available in various capacities (discharge rate in liter/hrs) for providing users with a choice to install it as per their requirements.

Unlike ordinary water purifiers, Elcomponics RO systems removes dissolved impurities like harmful chemicals, pesticides, rust, etc in water while retaining essential natural minerals that are required in drinking water while you get the convenience of clean drinking water in an eco-friendly way without using electricity

- Purify and desalinate almost any kind of raw water
- ♦ Reliable operation proven design based on long experience
- ♦ No noise, small or any other inconveniences in operation
- Available in 100LPD~300LPD (standard model) & can be made upto 5000 LPD on demand.
- Input salinity max. 2000 mg/ltr { Higher salinity models can be designed on customer requests }.
- Available in Stainless Steel or Powder Coated cabinet models
- Customization possible on request
- OEM model can be supplied

SOLAR BATTERY CHARGER

The state of art solar battery charger with DSP controlled MPPT

MPPT-1225, MPPT-2440, MPPT-4840, MPPT-12040

This DSP based MPPT charger intelligently ensure to fetch maximum power from PV Panels irrespective of the environmental factors such as temperature & Solar irradiation and transfer it to connected battery bank. Due to MPPT, it typically delivers 20~30 % extra energy in batteries than conventional PWM based chargers and it delivers way higher power in batteries than the panel directly connected to the battery.

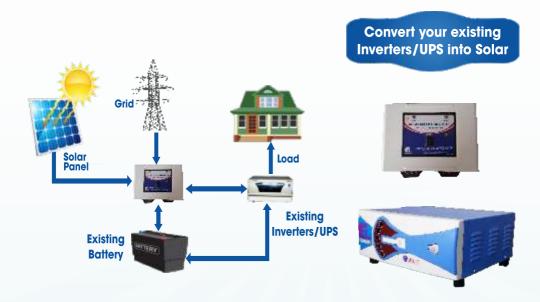


- DSP based Programmable control
- Maximum Power Point Tracker (MPPT)
- ♦ High Efficiency performance (>98%)
- Multi function LED indication (in 1KW onward)
- Intelligent Charging for longer battery life
- ♦ Reverse current flow protection from battery during no sun
- Available in 12V/25A, 24V/40A, 48V/40A, 120V/40A models
- Customization / OEM possible on requirement.

SOLAR SUPER CONVERTER - MPPT

Highly efficient Solar converter for solarising existing inverter & UPS

SC12M, SC24M, SC48M



- Supports any kind of existing inverters / UPS and no need to change available batteries - best economical solution for retrofit.
- \diamond Intelligent solar charger with built in Automatic Battery Management
- Digital Micro-controller based Topology
- Automatic Mains Change Over
- ♦ MPPT BCCV Charger
- Protection from & Reverse Panel connection, battery reverse
- ♦ LED indicator for Battery charging & Panel connection
- Available capacity: 12V-20Amp,24V-40Amp,48V-40Amp
- ♦ LED indicator for battery reverse connection, Battery charging status (available for 24V & 48V systems), panel connection
- ♦ Customization possible on requirement

SOLAR SUPER CONVERTER - PWM

Economical Solar converter for solarising existing inverter & UPS

SC12, SC12E, SC14, SC14E, SC22, SC22E, SC24, SC24E, SC34, SC44, SC84



- Cost effective solar charger with built in Automatic Battery Management
- Digital Micro-controller based Topology
- Automatic Mains Change Over
- PWM BCCV Charger (Two Stage)
- ♦ Protection from Reverse Battery & Reverse Panel connection
- Suitable for any kind of existing invertors
- LED indicator for Battery reverse, Panel reverse & solar charging
- Wide battery voltage options to choose: 12V, 24V, 36V, 48V, 96V
- Other battery voltage can be customize
- ♦ Charging current : 20Amp or 40Amp
- Customization possible on request





Mono - Crystalline Photovoltaic Module

1096B00

Mono-Crystalline Photovoltaic Module









Power Range 325 ~ 335 Wp



Highly Strengthened Design Module complies with advanced loading tests to meet 5400 Pa loading requirements



Resistance to Salt Corrosion and Humidity Module complies with IEC 61701: Salt Mist Corrosion Testing



Back Contact Cells



No string in the front side enhances light conversion space





PID-Free



Superior Performance at High Temperatures Less power loss in hot weather conditions due to the low temperature coefficient









Glass to Glass / BIPV modules







Key Features

- Edge-sealing technology for superior durability (cell protection against negative atmospheric impact).
- 30 year product warranty.
- 30 year linear warranty at 80% performance
- Back glass instead tedlar guarantees better heat dispensing. Glass is better thermal conductor than plastic. This ensures higher module efficiency in hot climate zones (compared with conventional modules).
- PVB instead of EVA 100% eliminates PID (potential induced degradation) at cell level. Also PVB lamination foil absorbs wider light spectrum from 280 nm instead of standard 330 nm.

Mounting:

Glass/Glass frameless modules are mounted using clamps, It does not require special skills for installers, or can be applied with special adhsive directly on frame.



Solar Atmospheric Water Generator

ELWATER EVO

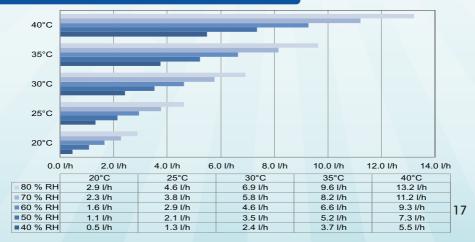


Making Pure Drinking Water from Atmospheric Air without any Electricity consumption as it run on Solar Power

Key Features

- Inbuilt storage for drinking water
- Inbuilt water purification system with mineralization unit
- Highly efficient operating
- All weather design Resistance to extreme Atmospheric condition
- Intelligent design inbuilt thermal & Solar power storage to work in non sunshine hours

Water Generation (in Liter) V/S Temperature & Humidity



SOLAR LED LANTERN

Durable Solar LED lanterns with high electronics efficiency

Hero(3W), Champ+(3W), Champ(2W), Asha(2W)









- ♦ High electronics efficiency (>85%)
- ♦ Uniform 360 degree light coverage
- Fully digital operation
- ♦ Two level of illumination (50% & 100%)
- Mobile charging facility
- ♦ Battery charging and battery low indicator
- \diamondsuit Available in red, green, yellow, Black and other colours
- Optional AC adaptor
- Customization possible on request

- \diamond 1 year warranty (conditions apply)
- ♦ AC mains and solar charging options
- ♦ Durable ABS body
- Safety features like over charge, deep discharge, reverse battery and short circuit protections
- Duty cycle of 4 hours a day under average daily insolation of 5.5 KWh on a horizontal surface

SOLAR LED STREET LIGHT

Intelligent and Economical Solar LED Street Lighting Solution

SL6, SL9, SL12, SL18, SL24, SL30



- ♦ Compact light weight weatherproof outdoor design in Aluminum Die Casting
- High luminosity LED lamps Uniform distribution of light
- ♦ Fully digital operation high efficiency circuit for utilizing last bit of battery power
- \diamond Protection provided against over charge / deep discharge / current reverse flow
- \diamond Automatic dusk to dawn operation turn on/off automatically as per ambient light
- \diamondsuit Battery charging and low battery indication on the unit itself
- ♦ Parallel LED strings to ensure redundancy of complete dark out
- ♦ LED lamp hour life : more than 60000 hours
- ♦ System voltage: 12V DC Nominal
- Customization possible on request

AC LED STREET LIGHT

Economical AC LED Street Lighting Solution

AC12, AC18, AC24, AC30





AC30



- ♦ Compact light weight weatherproof outdoor design in Aluminum Die Casting
- High luminosity LED lamps Uniform distribution of light
- ♦ Input voltage range: AC 180-240V @ 50 Hz
- ♦ Correlated colour temperature (CCT): 5700-6500K(Cool White)
- ♦ Isolated power supply with spike protection
- ♦ Metal core PCB used for efficient heat management
- ♦ Parallel LED strings to ensure redundancy of complete dark out

- Customization possible on request

SOLAR ACCESSORIES

Highly durable and sturdy Accessories for Solar Professionals

MC4 Connector

Type/Series	Product Description	Rated Current	Product Image
CN40-A003 / CN40-A004	MALE / FEMALE, SELF - LOCKED for 2.5mm², 4mm², 6mm² Wire	25 Amp	
CN4A-A001 / CN4A-A002	MALE / FEMALE, SELF - LOCKED For 4 mm² Wire	33 Amp	
CN4A-A003 / CN4A-A004	MALE / FEMALE, SELF - LOCKED For 2.5 mm² Wire	25 Amp	
CN4A-A025 / CN4A-A026	MALE / FEMALE, SELF - LOCKED For 6 mm² Wire	41Amp	
CN4A Series N	0 - 0106)		

Technical Specification					
Rated Voltage	1000V _{dc}	Protection Degree	IP 67		
Ambient Temperature	- 40° to 85° C	Application Class	A		

Fuse Connector

Part No	CM14-0091	Product Image
Rating	600V _{dc} & 1000V _{dc} , 30A	
Protection Degree	IP 67	
Temperature Range	- 40°C to + 85°C	NATIONAL TOTAL
Pin Dimension	φ 4.0 mm	
Fuse Dimension	10 x 38 mm	

PV Branch Connector

Part	No	Product Description	Rated Current		Rated Current		Product Image
TUV	UL		TUV	UL	market goods		
BN40-0001	BN40-0027	SELF - LOCKED / 2 MALE & 1 FEMALE	25Amp	20Amp			
BN40-0002	BN40-0026	SELF - LOCKED/ 2 FEMALE & 1 MALE	25Amp	20Amp			

We also provide solar (dc) cable (4~6mm²) TUV approved & inter-connects for various applications.





Solar EPC - Power Plants

Clean and Green energy with no recurring electricity cost

Solar Hybrid Power Plant

Solar Grid Tied Power Plant

Solar Off Grid Power Plant







- Registered channel partner of MNRE (Ministry of New & renewable Energy) for grid connected rooftop and small power plants
- Registered channel partner of MNRE (Ministry of New & renewable Energy) for Off Grid and Decentralized Solar Applications Programme

Since Jan'2013, we are working to become a household brand name in the Solar Power industry in India.. We are MNRE, GOI approved Channel Partner for installation of roof top Solar Power Plants, and are rated SP 2C with CRISIL.

We take Pride in

- ♦ First Indian company to have installed a 1MW Solar Power Plant in Japan
- We have also installed and commissioned the First Solar powered High Court (500kW) in the country, in Chhattisgarh
- India's first high efficiency (21%) 1MW solar power plant in Greater Noida, has been installed by us and was commissioned in Feb 2015

Some other Refrences

- 500KW of rooftop power plant commissioned at Airport Authority Lucknow
- ♦ 350KW of rooftop power plant commissioned at Savitri Bai Phoole kanya Inter College
- 250KW of rooftop power plant commissioned at Balak Inter college Noida
- ♦ 100KW of rooftop power plant commissioned at Dairy Tech
- ♦ 100KW of rooftop power plant commissioned at Prateek Builders , Noida
- ♦ 80KW of rooftop power plant commissioned at NTPC Netra
- ♦ 50KW of rooftop power plant commissioned at SSP office Noida
- ♦ 30KW of rooftop power plant commissioned at East point school
- 20KW of rooftop power plant commissioned at residence in hoshiyarpur Punjab and many more

SOLAR WATER PUMPING SOLUTION

The best Solar Pumping Solution for all kind of needs

Ranges Available from 1HP to 10 HP AC pump





- ★ MNRE channel partner
- **★ MNRE Approved Pump controller**

Key Features

- ♦ Operates under varying temperature
- ♦ Controller Inbuilt MPPT & VFD Controlled by DSP
- Protection against dry run and surges etc
- Steel Structures by structural ecperts for reliable life
- Optional manual change over to switch between solar & Grid input (Optional)
- Remote Control and Monitoring System (Optional)
- Loan & Subsidy available (on specific cases)

Benefits

- Reliable and long life (warranty on electronic is upto 5 years & on PV panels is upto 25 years)
- No fuel costs for water pumping
- ♦ 5-9 hours continuous working as per sunlight availability
- No dependence on erratic grid power
- No diesel consumption, no fumes Lowers cancer risk
- No batteries needed
- Customization possible on request

Centralized Solar LED Street Lighting Solution

Best in class Technology

This is latest technology for solar street lighting solution and even for 15~20 street lights, this solution is more efficient and economical than conventional individual street lights.

- Common Solar Panel Array and common battery bank located centrally.
- \diamond Specially developed MPPT based pure sine wave solar lighting PCU with hybrid source to power all of these street lights.
- → Lights are mounted on poles (as usual) and AC wire drown from central power room to each pole.

♦ AC LED Lights are used - Many options to choose.



Key Advantages (Over Conventional Method):

♦ Street lights works even in non sunny days like rain, winter or fog despite of solar energy is not sufficient to charge battery.

Solar PV Panel Arrev

- ♦ More Security against its theft as Battery bank and Solar panel are placed centrally only one guard can manage security of vital components.
- ♦ As solar panel and battery bank are centrally located, it is easier to clean and maintain the system. It is indeed huge cost saving in days to come compare to conventional solar street lights.
- In worst case (no sun for months, no grid for days), street lights can be powered by DG as option.
- ♦ Low capital cost, low operation cost, lowest cost of ownership.
- ♦ Customised solutions as per site / customer need.
- \diamondsuit Backup period can be designed / optimised as per needs.

Solar LED Street Lighting Solution

Conventional Solar LED Lightning (Individual Unit)

Our solar LED street lights are optimised to harness the sun's energy to provide high quality illumination for outdoor applications during dark hours. The technology is breakthrough to deliver convenient, durable and reliable solution with lowest possible investment and minimum maintenance. We have made various options to choose as per need with following specs:



Model Number	CSLS6	CSLS9	CSLS12	CSLS18	CSLS24	CSLS36
Solar PV Modules (Poly Crystalline)	20Wp	40Wp	75Wp	100Wp	100Wp	150Wp
LED DC Luminary (Lumen >120 lm/w, IP65)	6W	9W	12W	18W	24W	36W
Solar Charge Controller	Yes	Yes	Yes	Yes	Yes	Yes
Dusk to Dawn Feature	Yes	Yes	Yes	Yes	Yes	Yes
Solar Tabular Battery (12v with 5 year warranty)	20Ah	40Ah	60Ah	75Ah	100Ah	120Ah
Battery Box (ABS / Metal)	Yes	Yes	Yes	Yes	Yes	Yes
GI pole height (with LED & panel mounting structure)	3 Mtr	4 Mtr	4 Mtr	5 Mtr	5 Mtr	5 Mtr
BOS (DC Cables, connectors, Thimble, Screw, Etc)	Yes	Yes	Yes	Yes	Yes	Yes

Solar LED High Mast Lighting Solutions

With our technical and engineering expertise, we have developed high quality Solar LED High Mast. It is fabricated from high grade raw materials from reliable resources that guarantee us best quality standards. These High Mast are having large space to height ratio and can illuminate larger area without the need of many lighting columns. It have auto dusk to dawn feature and these lights are easy to maintain. It is capable of delivering brighter illumination and are best for use in remote locations where grid is not available.



- Environment friendly
- Corrosion resistant
- Clear illumination
- Compact design
- Quality tested



Precision Voltage Regulator (PVr) - 1 Phase

High frequency PWM Driven IGBT Controlled Voltage stabilizer / conditioner

PVr-3000-9111, PVr-5000-9111, PVr-7500-9111, PVr-10000-9111, PVr-15000-9111, PVr-15000-9111, PVr-25000-9111, PVr-30000-9111



Intelligent precision line voltage regulator/Power line conditioner or PVr provides smooth & stable output voltage within ±1% of nominal, for vast input voltage that varies between 150-300 Vac. PVr is compatible with all loads as it does not switch any components in the power path. There is no electrical motor used inside for correction of output voltage and it is one of the fastest voltage regulator in the world.

- ♦ Fast regulation: corrects output voltage @ 2500 V/sec minimum
- High power to weight ratio
- ♦ High efficiency (>99%) at nominal voltage
- ♦ Fail safe design: automatic bypass in over load & over temperature condition
- ♦ No switching in power path
- ♦ No motor or moving parts
- Continuous output voltage control (not in steps)
- Cabinet are designed for low floor area small foot print
- Low impedance & quiet operation
- Compatible for all kind of loads
- ♦ Protection against over/under voltage, over load / short circuit & over temperature
- ♦ PVr is easy to install in any environment
- Fast response time
- Remote monitoring (wired/wireless) possible (optional)
- Available from 3KVa~30KVa in 1-Phase models
- Customised design is possible on demand

Precision Voltage Regulator (PVr) - 3 Phase

High frequency PWM Driven IGBT Controlled Line Voltage stabilizer / conditioner

PVr-900-9313 to 30000.PVr-40000-9313 to 150000-9313





Intelligent precision voltage regulator/power line conditioner / PVr provides smooth & stable output voltage within $\pm 1\%$ tolerance for vast input voltage range that varies between 300-500 volts (as standard configuration option).

- Highest power to weight ratio
- Unbalance correction all 3 phases are treated separately
- ♦ No switching in power path-no moving parts/motors inside
- Continuous output voltage
- Completely noiseless operation
- Lowest foot print (less space needed)
- Compatible for all kinds of loads
- Insulation used is Class H or better
- ♦ Fast regulation: corrects output voltage @2500 volt/sec (minimum)
- ♦ High efficiency (>99.8%) at nominal voltage
- Built in protections against: over / under voltage, over load, over temperature & short circuit, (additional customization also possible)
- System status indicator through LCD display for each phase
- ♦ Fast response time
- ♦ Remote monitoring (wired/wireless) possible (optional)
- ♦ Available from 9KVa~150 KVa,3 phase models
- ♦ Customised design possible on demand

DELTA Precision Voltage Regulator (\triangle PVr)

3-Phase 3-wire IGBT delta PWM Technology

DPVr-30 to DPVr-300

ETIPL has developed 3-phase 3-wire input, 3-wire output (delta in delta out) Static voltage stabilizer. It is IGBT based delta PWM topology, 3-phase static voltage stabilizer up to 300KVa.lt is 3-phase vector addition / subtraction Voltage Stabilizer that can be used for buck and boost voltage regulation with an accuracy of +/-1%. The duty-cycle of the PWM is controlled by its DSP which has PWM resolution of 1ns steps so it actually gives accuracy of much better than 1% regulation.



- \diamond 3-phase 3-wire operation no need of neutral input wire for voltage monitoring and correction.
- \diamond IGBT based PWM type voltage stabilizer having tight regulation and faster correction speed.
- \diamond Direct AC-AC conversion without rectifying to DC improves the efficiency and system reliability.
- ♦ Only the difference power is processed through the system resulting in smaller size buckboost transformer sizing and higher efficiency.
- ♦ Active clamping technology no high surge during switching off.
- ♦ 20KHz PWM control resulting silent operation and no distortion in output waveform.
- Highest power to weight ratio Lowest foot print.
- \diamond No switching in power path longer life without any maintenance.
- ♦ Automatic uninterruptible bypass in case of hazard/Fault situation.
- \diamond Overload and short circuit protection, soft start, high & low voltage cut off, automatic by pass.
- \diamond Technology up to 200KVa three phase (up to 300KVa in +/-10% range).
- ♦ Four line LCD to display parameters like input/output voltage, current and system health.
- \diamond Built-in data logger (optional). All parameters are periodically saved to flash memory with date and time stamp.
- ♦ Extra compact design one of the smallest high capacity stabilizer in the world

QUIKORRECT PVr

High frequency PWM Driven IGBT Controlled Static Line Voltage stabilizer

Range available from 2kVA, 1 Phase ~ 200kVA, 3 Phase

ETIPL introduces innovative way of automatic voltage regulator with correction speed of 20000 volts per seconds. In this topology, direct AC-AC conversion (without rectifying it into DC) is used with IGBT chopper control at its power circuit. The chopping frequency is kept around 20 KHz which ensure absolutely silent operation on pure sine wave output (no waveform distortion).





- Direct AC to AC conversion high efficiency and reliability.
- ♦ Rapid cycle by cycle correction of output even able to correct sudden voltage fluctuation happened due to welding machine in the same line.
- ♦ Continuos correction no distortion in output waveform.
- Inbuilt protections for Overload, Short circuit, High/Low voltage input.
- → Automatic bypass incase of any internal failure.
- ♦ LCD display for displaying all important parameters.
- ♦ Compact size and light weight very small footprint.
- ♦ 20KHz PWM control with IGBT power stage Silent operation.
- ♦ Fully solid state. No moving part, hence more life and no maintenance in years to come.
- ♦ Customized / OEM version possible.

SOLAR TABLE FAN

3 LEVELS OF OPERATION

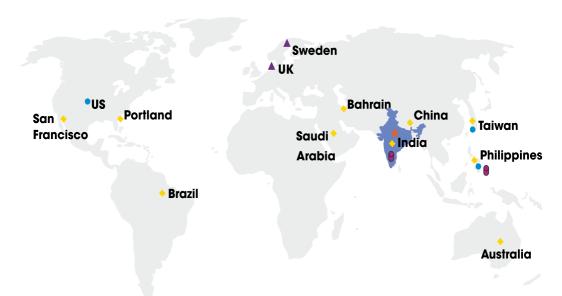
ETIPL DC Fan operate with 12 volt DC input supply and have 3 modes of operation i.e. Low Level, Medium Level and High Level. Due to high efficient motor it typically delivers 1500 RPM at High Level with low power consumption. It can operate with AC charger / adapter, 12V Solar Panel or 12V battery. Fan body is made of ABS plastic which is more durable.

On requirement, we can supply BLDC Motor Technology based Solar Table Fan that are much more efficient than conventional DC fans.



- ♦ Designed to operate on 12 volt DC input supply.
- \diamond 3 level of operation (Low Level, Medium Level and High Level).
- ♦ Appx.1500 RPM at full level.
- ♦ Silent performance and rigid design.
- ♦ Solder free Installation.
- ♦ Ideal to use with 12 volt 2 Amp adaptor as well as Solar Panels.
- High efficient motor.
- Pure ABS plastic body.
- ♦ Attractive high performance blade with best air flow.
- ♦ 16" front and rear protection net.
- ♦ High RPM with low power consumption.
- ♦ All accessories in single box.
- ♦ Design by EL Group and Make in India.
- ♦ Customized / OEM models are available.

Global Presence





Corporate Office



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