



## **FLYLINE SOLAR STANDALONE INVERTER**

Murickens Group is the best manufacturer of Solar power Systems in Kerala. It is an ISO 9001:2015 certified company, As we all know Sun is the Master Power of Energy but nobody is taking pain to think about the entire power of the Sun which has a direct involvement in the day-to-day affairs of every living thing and to be more precise we can convert different kinds of energy of the sunlight or sunrays for our day to day use. We the Murickens Group, always concentrating on this power convert sun energy into electrical energy .by developing some of the conversion equipment's like MG Solar Water Heaters, Flyline Solar Inverters, Flyline Solar DC Street Light System, Solar UPS, Solar Lantern etc. and have already installed thousands of fully automatic smaller and bigger solar power units all over India since 2000. For your kind information we use only the most modern technology available in the world for the manufacturing of solar power plants and arrange Ministry of New Renewable Energy (MNRE) subsidies for the solar products as per the availability.

Flyline solar Stand alone Inverters convert DC power to AC power that can be used for lighting and other electrical power loads. Direct current is produced by many renewable energy sources like solar panels or small wind turbines . Batteries are charged by PV array and converted to AC power with the help of solar off grid power plant. Flyline solar power unit makes DC to AC with the help of converter, tubular batteries and power generating solar modules. We have residential and commercial solar power house units and in order to promote the utilization of solar power, Government of India provide MNRE subsidies through ANERT and there is no need of any license or permission from the Government to install the units.We have made a place of our own in the field of solar based power units since our induction in 2000 and have done thousands of solar power unit installations in many parts of India including -Kerala Agriculture Research University, Malappuram, The CISF 7th battalion military camp, Hyderabad, International Airport, Karipoor, Central Marine Fisheries Research Institute, Cochin, TCS (Info Park Cochin) etc in addition to a large number of Private Organizations..It is also essential that the installation should be undertaken by a well qualified and experienced technical person to get 100 percent output of the system and to avoid unnecessary expenses.

## FLYLINE STAND ALONE POWER UNIT FEATURES:-

▶ Pure sine wave output. ▶ISO: 9001 -2015 Certified solar power conditioner. ▶IGBT with German PWM intelligent charging technology.▶Work with solar power, the best way to save money using natural resource. ▶Attractive Designs.▶Pollution free type.▶Single Switch Operation.▶Fully automatic. ▶IGBT based topology. ▶ Protection from lightning, ▶ Over Load Protection.▶ Over Charge and Deep Discharge cut off. ▶ Independent Digital display inverter input and output voltage, load, etc. ▶Audio and Visual Indicators. ▶Can connect to the existing wiring. ▶No husking sound. ▶It is a fully automatic built-in charging control or external system, No need of any manpower. ▶Provisions for connecting grid power.

▶ Optional mains charger ON/OFF switch.▶Back-up power support.▶Option for customization of back-up power.The Special feature of the system is when we are connected to the main line and if the battery is full and there is sufficient sunlight the system will automatically cut the main line (KSEB Line) off and connect the solar system. ▶Our built in solar charger is floating type and once it fully charges the battery, it goes to trickle charging. This will provide more battery life and can utilize 100 % efficiency of solar panel power..▶An ideal unit for day and night power supply.

## FLYLINE STANDALONE SOLAR PCU WORKING MECHANISM

- 1) When solar energy is sufficient total output load will operate on solar Inverter. Excess solar power will charge batteries.
- 2) When solar energy is weak then inverter is taking DC source from batteries to compensate the output load.
- 3) When the battery discharge level reaches 11.2 volt or below the output load is shifted to grid.
- 4) At day time again each battery become 13.5 v the output load again shift to solar Inverter.
- 5) At night or when there is no sunlight the batteries reach 70% discharge level (30 % kept as a buffer) the output load is shifted to grid. (Each battery discharge level become 11.5 v )
- 6) After shifting load to grid the batteries are charged from solar energy and if solar energy not sufficient to charge the batteries, then there is an optional on –off switch ( manual ) to charge the battery from grid up to 12 volt and full charge volt of 13.5 in each battery .
- 7) By using solar power the solar charger high cut-off is 14.5 V of each battery.
- 8) At night during changeover of load from battery backup to grid supply (i.e. 70 % battery discharged) and if grid supply is absent then load is shifted to solar inverter to use buffer battery backup (i.e. balance 30 %)



## TECHNICAL FEATURES OF FLYLINE STANDALONE SOLAR POWER INVERTER

Sl. No.	Parameter	Single Phase Unit				Three Phase Unit			
1	Rating	1 KVA to 15 KVA				6 KVA to 100 KVA			
2	Battery Volt /KVA	1KVA-36V	2KVA-48-72V	3KVA-72V	5KVA-96-192V	8KVA-120V-192v	10KVA-192-240V	12KVA-192-240V	15KVA-240V-348v
3	Input Voltage Range	190 V -270 V ac or <b>solar dc</b>				375-450V ac or <b>solar dc</b>			
4	Nominal Output Voltage	220V				415V			
5	Output Frequency	± 1%				± 3%			
6	Input Frequency	50 Hz: ± 1%				50 Hz: ± 1%			
7	Power Factory	-0.8 lagging to unity							

8	Voltage Correction Rate 1. Air Cooled 2. Oil Cooled	Voltage Correction	35V/Sec.	
9		35V/ Sec		
10		35V/ Sec	35V/ Sec	
11	Efficiency	90%	90%	
12	Control	Digital	Digital	
13	Transformer	High Efficient	High Efficient	
14	Noise	Low noise <50db		
15	Heat	< 40 o C		
16	Wave form	Pure sine wave		
17	Mounting	Free on wheel		
18	Solar charger-built-in	Floating type & Trickle charging.	Floating type & Trickle charging.	

## MURICKENS GROUP

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Our YouTube channels: - <https://www.youtube.com/c/solarpowermurickensgroup>

<https://www.youtube.com/user/murickens>

Under the name **MG** and **FLYLINE**, MURICKENS GROUP is a company with experience and credibility in the manufacture and marketing of electronic and electrical products.



MG Servo Voltage Stabilizer, Solar Water Heater, Deep Freezer, Mobile Mortuary, Mortuary Chamber etc.



Solar On Grid , Off Grid & Battery Less Grid Compensating Inverter, Solar Street Light Garden Light, Online & Off line UPS, Solar Panel, Solar Charging Controller, 110V Step Down Stabilizer, Solar Battery, Modular Voltage Protector .