



Solar Hybrid UPS



System Consists of:

- Solar Photovoltaic Module(s)
- SPV Module Mounting Hardware
- Batteries
- Power Backup Inverter with AC Charger & ATS
- Cables and accessories

How it works:

- Solar PV Module converts Sun light into electricity and stores this DC Power in the Battery bank.
- When Grid Power is available, Auto Transfer Switch will directly feed the loads from AC Mains Power
- When AC Mains Power fails, ATS will automatically change-over to Inverter mode and feed the loads.
- Battery is charged by Solar / Grid, depending on the State of Charge and load operation.
- Inverter converts DC Power in to AC Power, to operate standard electrical appliances.
- In areas where Grid power is not available. the system shall work on solar Power alone.

Loads suitable for usage

1. Fluorescent Lamps
2. Incandescent Bulbs
3. CFLs
4. Television – Color or B&W
5. Computer
6. Table/Ceiling fan

For any other load check and confirm from KL Solar before connection

4 Hrs with 200W combination of above loads in AC Hybrid mode operation

2 Hrs with 200W combination of above loads in Solar Standalone mode of operation

| Sl. No | Description | UPS12-600 | UPS24-1400 | UPS24-2000 |
|--------|--|--------------------------|--------------------------|--------------------------|
| 1 | UPS/Inverter Type | 600VA-12V | 1400VA-24V | 2000VA-24V |
| 2 | Solar Module rating (@ STC) | 80 Wp X 2Nos | 80 Wp X 4Nos | 80 Wp X 4Nos |
| 3 | System Nominal Voltage (nominal) | 12V DC | 24V DC | 24V DC |
| 4 | Output AC Voltage, Inverter mode | 210V to 240V, 50± 1Hz | 210V to 240V, 50± 1Hz | 210V to 240V, 50± 1Hz |
| 5 | No. of Batteries | One | Two | Two |
| | Ex-Factory PRICE (inclusive of 4%VAT) without Batteries | Rs.45000/- | Rs.89200/- | Rs.90500/- |
| | Ex-Factory PRICE (For Exports) without Batteries | US\$.950/- | US\$.1900/- | US\$.1925/- |

| Typical Load Chart^# | | | |
|---|--|--|--|
| 600VA / 12V SYSTEM | | | |
| Load | Backup Time with 100 AH Battery | Backup Time with 135 AH Battery | Backup Time with 165 AH Battery |
| 1 fan + 1 Tube Light | 7.2 Hrs | 11.1 Hrs | 14.3 Hrs |
| 1 Fan + 1 Tube Light + 2 CFL(Energy Saver) | 6 Hrs | 9.2 Hrs | 12 Hrs |
| 2 Fans + 1 Tube Light + 2 CFL | 3.9 Hrs | 6 Hrs | 7.7 Hrs |
| 2 Fans (48mm Ceiling Fan 3 Blades, 1000-2000 mm sweep) + 2 Tube Light(28 W) | 3.3 Hrs | 5.1 Hrs | 6.5 Hrs |
| 1 Fan + 2 Tubelights + 1 TV (21") | 3.3 Hrs | 5.1 Hrs | 6.5 Hrs |
| 2 Fans + 2 Tubelights+ 2 CFL | 3 Hrs | 4.6 Hrs | 6 Hrs |
| 2 Fans + 2 Tubelights+ 1 Computer | 2.6 Hrs | 4 Hrs | 5.2 Hrs |
| 2 Fan + 2 Tube Lights + 1 TV (21") | 2.6 Hrs | 4 Hrs | 5 Hrs |
| 1400VA / 24V SYSTEM , 2000VA / 24V SYSTEM | | | |
| Load | Backup Time With 2Nos -12V/135Ah Battery | Backup Time With 2Nos -12V/165Ah Battery | Backup Time with 2Nos -12V/200Ah Battery |
| 2 Fan + 2 Tube Light | 11.5 Hrs | 15 Hrs | 18.75 Hrs |
| 2 Fan + 2 Tube Light + 4 CFL (Energy Saver) | 9.6 Hrs | 12.4 Hrs | 15.5 Hrs |
| 2 Fan(48mm Ceiling Fan 3 blades, 1000-2000mm sweep) + 4 Tube Light (48W) | 7.5 Hrs | 9.7 Hrs | 12.12 Hrs |
| 4 fan + 2 Tube Light | 7.1 Hrs | 9.2 Hrs | 11.5 Hrs |
| 4 fan + 2 Tube Light + 4 CFL | 6.1 Hrs | 8.0 Hrs | 10 Hrs |
| 2 fan + 6 Tube Light | 5.5 Hrs | 7.2 Hrs | 9 Hrs |
| 4 fan + 4 Tube Light | 5.3 Hrs | 6.8 Hrs | 8.5 Hrs |
| 2 fan + 4 Tube Light + 2 TV (21") | 5.3 Hrs | 6.8 Hrs | 8.5 Hrs |
| 3 fan + 3 Tube Light + 4 CFL + 1 Computer | 4.8 Hrs | 6.1 Hrs | 7.62 Hrs |
| 4 Fan + 4 Tube Light + 2 TV (21") | 4.1 Hrs | 5.2 Hrs | 6.5 Hrs |
| 5 fan + 3 Tube Light + 4 CFL + 1 Computer | 3.6 Hrs | 4.8 Hrs | 6 Hrs |
| 5 fan + 5 Tube Light + 1 Computer | 3.3 Hrs | 4.3 Hrs | 5.37 Hrs |

Daily Sunshine considered > 5 Pk. Sun Hrs.
 Connected Loads to be segregated and wired separately (both Phase & Neutral)
 ^# The Operational Hours are for indicative purpose only, it may differ for actual loads.
 Parameters may differ in the Actual Product due to continuous technology up-gradation.

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