# SOLAR POWER FOR EXTERNAL BATTERY UPS / INVERTER...




ISO CERTIFIED COMPANY
ISO CERTIFIED 9001:2015
ISO 14001:2015

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# PWM SOLAR MANAGEMENT UNIT

MICROTEK's, micro-controller based high-efficiency SMU (Solar Management Unit) is best suited for low-power solar applications. The micro-controller in Microtek Solar Management Unit, senses the battery full-charge voltage and It cuts off the battery from charging, when it reaches full charge status. It reconnects the battery if the battery charge drops to a preset level.

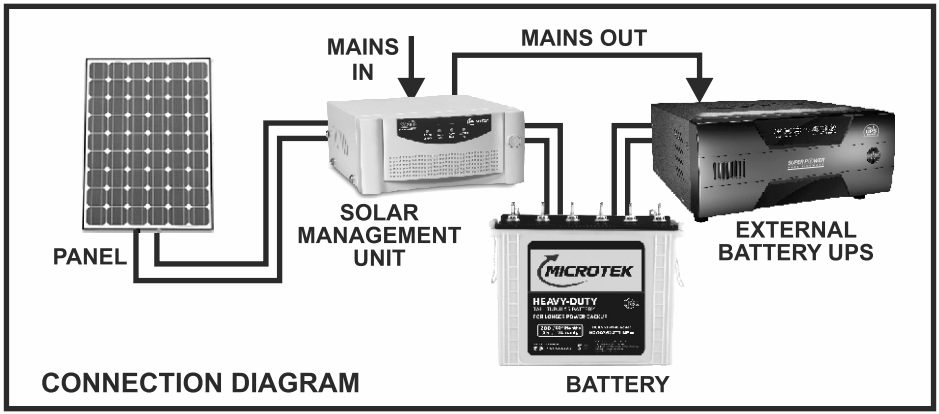
Microtek SMU also disconnects the solar panel from the battery to avoid the reverse current flow from the battery to Panel during night. This product has been specially designed to upgrade any conventional Ext. Battery UPS / Inverter in to Solar Ext. Battery UPS / Inverter with setting of first priority given to Solar while Charging. The charger has been programmed to connect and disconnect the AC mains to the Ext. Battery UPS / Inverter depending upon the battery voltage levels to ensure use of solar as primary power and mains only for the emergency.

| MODEL NO. | MTK1012 SMU | MTK3012 SMU | MTK3024 SMU | MTK6012 SMU | MTK6024 SMU |
|---|---|---|---|---|---|
| Max. Solar open circuit voltage(VOC) | 22V | 22V | 42V | 22V | 42V |
| Max. Solar Panel Capacity | 120Wp | 360Wp | 720Wp | 720Wp | 1440Wp |
| Max. Battery charging current | 10A | 30A | 30A | 60A | 60A |
| Peak Charger Efficiency | 99% | 99% | 99% | 99% | 99% |
| System Voltage(V) | 12VDC | 12VDC | 24VDC | 12VDC | 24VDC |
| Battery Full Voltage (solar charging) | 14.7±0.4V | 14.7±0.4V | 29.4±0.8V | 14.7±0.8V | 30.0±0.8V |
| Battery Voltage (mains disconnect) | 14.7±0.4V | 14.7±0.4V | 29.4±0.8V | 14.7±0.8V | 30.0±0.8V |
| Battery Voltage (mains reconnect) | 11.6±0.4V | 11.6±0.4V | 23.1±0.8V | 11.6±0.8V | 23.8±0.8V |
| Recommended Battery Capacity* | 1x150AH | 1x200AH | 2x200AH | 1x400AH | 2x400AH |
| LED Indications | : Solar Charging, Panel Reverse, Battery Reverse, Output ON | | | | |
| Connections | : **Terminal Block:** for Solar Panel & Battery Connections. **Mains In:** 1mm² Power Cord with 16A molded Plug. **Mains Out:** 15A Power Outlet. | | | | |
| Front Panel Switch | : **Normal:** Default position, Solar Charging & mains control. **BYPASS:** Solar Charging & Mains Bypass. | | | | **One Year Warranty** |

*Suitable upto defined AH with different Series/Parallel combination of batteries as per product design(12V/24V).

## INSTALLATION

**NOW CHARGE BATTERY INSTALLED WITH EXISTING / NEW EXT. BATTERY UPS / INVERTER with ZERO COST SOLAR POWER...**




* Make the connections as shown in the above diagram.
* **IMPORTANT**: Panel & Battery connections must be connected with correct polarity.
* Keep the front panel switch in 'NORMAL' position.
* **ENSURE Battery/Battery Bank Voltage are as recommended.**

## CAUTION

* Wrong connections to panel or to the battery may damage the unit.
* Open circuit voltage or panel capacity exceeding the limit will damage the unit.
* Don't use battery of different types/make while making parallel or series combination.

**Model:**

- MTK1012 SMU ☐
- MTK3012 SMU ☐
- MTK3024 SMU ☐
- MTK6012 SMU ☐
- MTK6024 SMU ☐

In case of any Service requirement kindly contact Microtek Customer Care, specifying following details:

(i) **Model Number & Serial Number of the Product.**
(ii) **Name & phone no. of the contact person with full address & e-mail ID if any.**
(iii) **Reported problem/description of the complaint.**

**Note: (a) Refer all servicing queries to Microtek Customer Care only.**

**(b) Please take care that Serial Number is kept intact and that the product is not allowed to be fiddled (opened) by any unauthorised person; otherwise the warranty will be void.**

**MICROTEK CUSTOMER CARE:**

**ALL INDIA Call/WhatsApp: 7283838383**

**E-mail: cc@microtek.in**

*All disputes subject to Delhi jurisdiction only.

| SERIAL NO. |
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MICROTEK

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