

TRISP (Triple Input Smart Power Supply)

Triple Input Smart Power Supply (TRISP) is a novel power supply designed and developed in VSSC during 2015. TRISP is best suitable for powering electronic gadgets in all domains of society.

TRISP is a unique power supply for Desktop PCs and other electronic gadgets which finally use DC power. TRISP ensures seamless power flow from SPV panel, utility grid and battery backup power sources. TRISP power supply gives 58 to 65% power savings compared to online UPS powered systems. With solar power, it saves up to 85% for a year by using only one third capacity of the solar panel required for the conventional solar inverter. Capacity of the lead acid battery required for backup can also be reduced to only one fourth of the equivalent UPS / Inverter system. The TRISP architecture can be designed as portable or mobile power sources or building integrated structure and has wide scope of application in industrial, commercial and domestic sectors.

TRISP architecture is unique and capable of powering all these devices with direct DC power, utility AC power and Battery power ensuring seamless power changeover and added power redundancy. Tremendous power savings is achieved by the new DC powering concept with optimised capacity of SPV panels, minimising losses occurred in conventional power generation, transmission and distribution systems. The extra efficient battery backup feature inbuilt with TRISP totally eliminates the need of UPS systems. This eliminates the need for UPS and results in saving of valuable floor space, reliving the user from safety concerns related to conventional UPS systems. Higher level of voltage regulation and power quality are the other features of TRISP. TRISP may also be considered as an effective and economic solution for EV charging requirements.

USA, CANADA, Singapore and South Africa have granted patents and patent applications are filed in Japan, Europe and India are in its final processing stage.



TRISP POWERED DESKTOP PC

TECHNOLOGY TRANSFER

Interest Exploratory Note

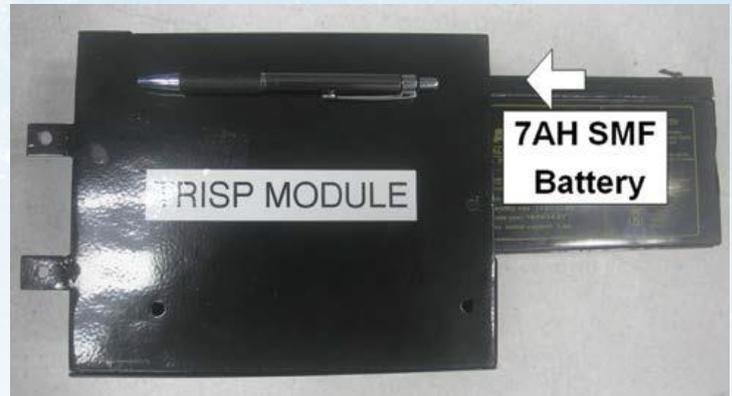


Features

- Eliminates UPS and replaces SMPS in Desktop PCs
- Utilizes one of the three power sources including non-conventional power ie, solar power, mains power, and battery power.
- Ensures seamless change over between solar, utility and battery sources

Advantages

- 5 fold back up time compared to 1KVA UPS powered PC.
- Smartly uses green energy whenever it is available. Drastically reduces power line pollution.
- Power saving for 100000 PCs - around 1.5 million units per year (Rs.1.25 to 2 Cr).
- Mass production cost - one fourth cost of a 1KVA Online UPS.
- Ideal for use in remote settlements.
- Minimum maintenance, Better reliability and Safety
- Provision for powering DC input LCD/LED displays



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