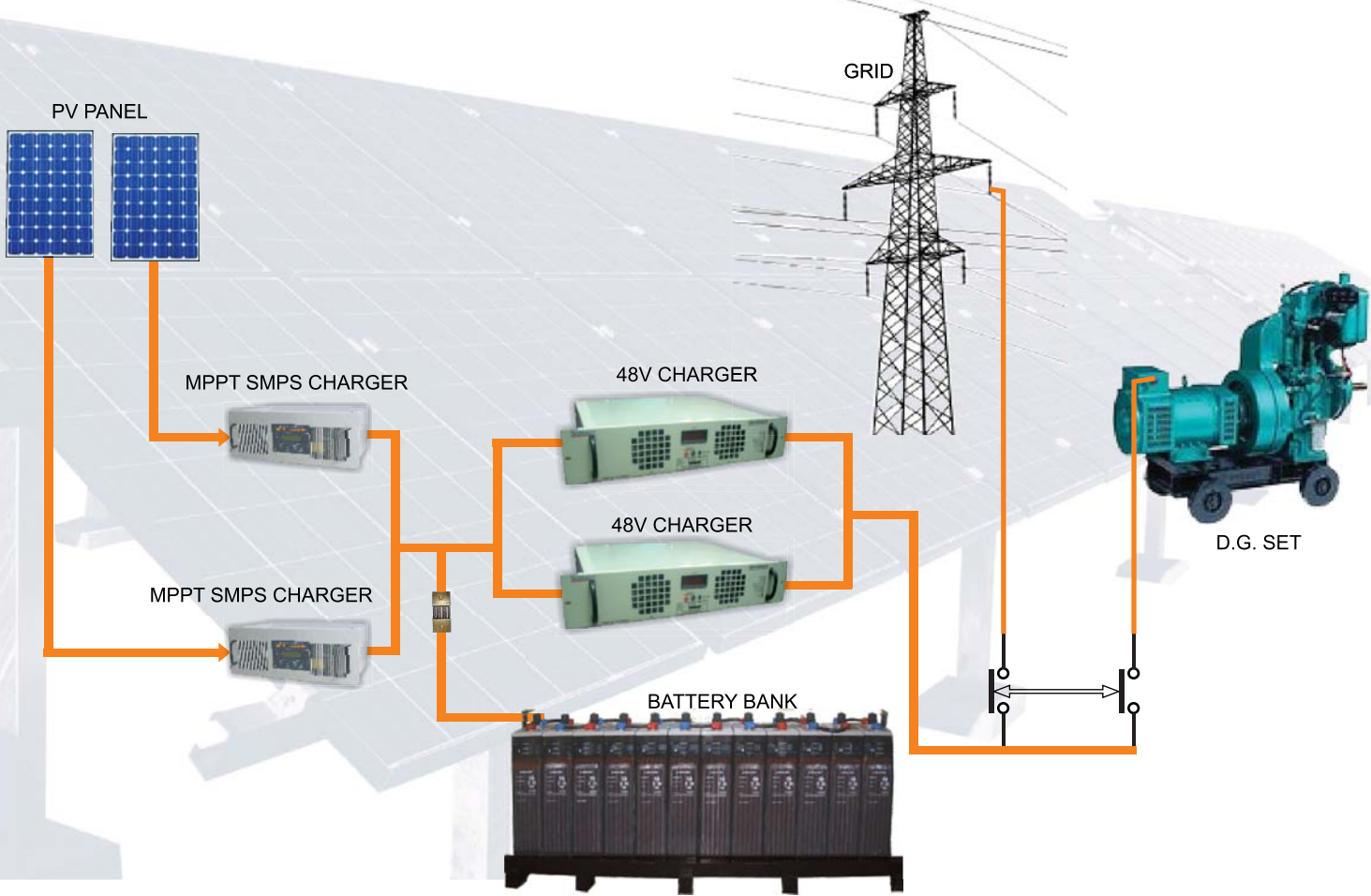


24V / 48VDC SOLAR-MAINS-DG-HYBRID SYSTEM

STATCON offers Hybrid System based DC UPS for critical application like Telecom, Railways Signalling & Telecom, Gas pipeline, installation of Remote Stellite / Broadcasting installation and many more. A typical electrical schematic drawing is given below-



Salient features of Hybrid System

- Adaptive MPPT charging algorithm, ideal to track maximum Power Point
- High efficiency Solar Power Conversion
- Wide input range of AC mains for SMPS charger
- Automatic current sharing between Solar & Mains with solar priority
- Intelligent DG control feature
- Provided with lighting & Surge protection on both inputs
- Expandable for any Power from 2KW upto 30KW DC
- Truly Hybrid and Maintenance free
- Remote monitoring via standard RS 485 bus
- Optional touch screen display
- Network connectivity via ethernet / GPRS for central monitoring for interactive user interface

APPLICATIONS

- Telecom / New BTS installations
- Gas Pipe line / Cathodic protection
- Railway Signalling / Telecom
- Satellite Earth Station / Broadcasting
- Telemetry / Remote monitoring Station of Defence



24V / 48VDC SOLAR-MAINS-DG-HYBRID SYSTEM

The Hybrid system taken in power for Solar panel as first priority and charges battery plus supplies DC bus load demand. If Battery is deep discharged and Solar is low, it can take balance current from mains based SMPS charger simultaneously till battery gets fully charged. Thereafter it would be Solar only. In addition to it, if the battery gets discharged beyond a sattable level, set of "DG START" contact is generated which can start and stop DG set.

The DG so started can be programmed to run for specified time duration of 1,2,3,4 hrs, when a "DG STOP" command will stop it. The whole equipment can be supplied upto any power and for any type of VRLA, flooded or Ni-cd Battery Bank.

The Technical Specification of the Hybrid System are :

Features:

A. MPPT Charge Controller Module :

A.1	Input Voltage	:	60V to 130Vmp
A.2	Ambient	:	0 to 50° C
A.3	Output Voltage (Max.)	:	32V / 60V DC
A.4	Output Current	:	30A / 60A / 80A / 100A
A.5	Efficiency	:	>96.5%
A.6	Regulation	:	<±2%
A.7	Metering	:	Input Voltage / Current / Power Output Voltage / Current / Power
A.8	Temp Compensations for VRLA Battery	:	Provided
A.9	Features	:	- Intelligent Solar priority feature - Full DG control - Independent parameter control via keypad - Active current sharing feature

B. SMPS Charger Module :

B.1	Input Voltage	:	160V to 275V, 1ph AC
B.2	Ambient	:	0°C to +50°C
B.3	Output Voltage (Max.)	:	32V / 62V DC
B.4	Output Current	:	12.5A / 25A / 50A
B.5	Efficiency	:	>90%
B.6	Regulation	:	<±2%
B.7	Metering	:	Output Voltage / Current
B.8	Temp Compensations for VRLA Battery	:	Provided
B.9	Other Features	:	Current sharing / Wide input range / Active PFC

C. DC UPS Cabinet :

C.1	System Voltage	:	32V / 62V
C.2	System Current	:	50A to 500A
C.3	Type of Enclosure	:	Free standing, IP-20
C.4	Metering	:	Touch Screen Display giving: - Solar Voltage / Current - Load Voltage / Current - Battery Voltage / Current

STATCON'S PRODUCT RANGE FOR SOLAR APPLICATIONS

- Hybrid Solar Inverter
- Off-Grid Solar Inverter
- 24V / 48V MPPT Charge Controllers
- 110V / 220V MPPT Chargers
- Array Junction Box
- Intelligent String Monitor
- MW Solar Inverter Solution from Answer Drives, Italy
- 3 Phase Bi-Directional solar Inverter

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