E-Sharp Solar Solution Pvt. Ltd.
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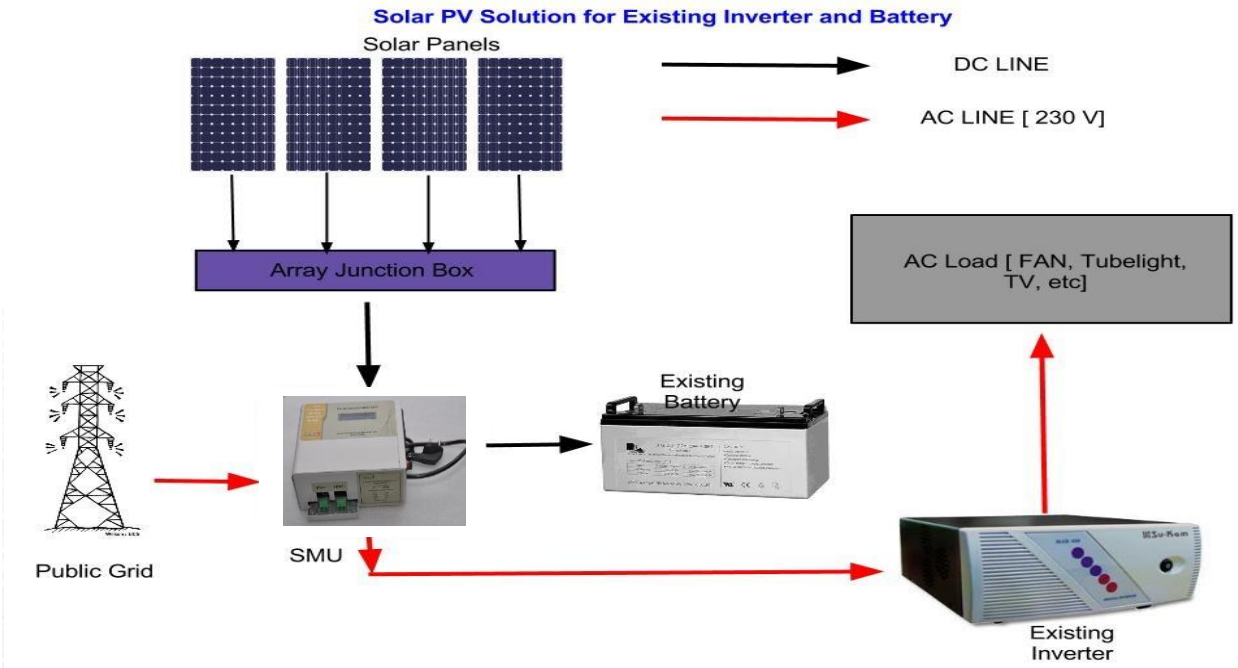
E-Sharp - Solar Management Unit

Solar Management Unit Convert normal inverter into solar inverter



KEY FEATURES

- ✓ Advanced microprocessors to design optimize operation processes.
- ✓ Battery charging with inbuilt PWM technology charge controller.
- ✓ No need to change your exiting normal inverter for solar operation.
- ✓ intelligently to decide when to charge your inverter from solar or the grid
- ✓ Four stage charging – Deep Discharge, Boost, Absorption, Trickle charge.
- ✓ It protects batteries from overcharging and battery temperature compensated charging.
- ✓ Reserve polarity protection with LED- indication- for battery and Solar Panel both.
- ✓ Disconnects the mains and powers your house via inverter using energy stored in batteries.
- ✓ When batteries are drained Solar management unit first tries to get charged through solar but in absence of solar
- ✓ you can choose the battery reserve based on your needs
- ✓ LCD Display
- ✓ Data logger
- ✓ Wall Mounting, compact, rugged and attractive product design.

SMU Scheme only for one month:		
SUM Rating	Buy	Free
12V/24V – 20A	50	10
12V/24V – 40A	50	10
48V - 40A	50	10

Technical Datasheet:

Description	Specification				
Model	ESSMU122420	ESSMU122440	ESSMU4840	ESSMU9650	ESSMU12050
Manufacturer	E-Sharp Solar Solution Pvt. Ltd.				
Brand	E-Sharp				
Controller type	Zero Drop PWM Control(Pulse with Modulation)				
Display type	LCD Display (Liquid Crystal Display)				
Application	Convert Normal Inverter Into solar Inverter				
Housing Material	M.S Powder Coated				
Mounting Type	Wall Mounting				
Body Colour	Siemens Grey				
Nominal System Voltage	12/24V	12/24V	48V	96V	120V
Solar Charging Current	20A	40A	40A	50A	50A
Solar Module	12V : 300Wp 24V : 600Wp	12V : 500Wp 24V : 1000Wp	48V : 2000Wp	96V : 5000Wp	120V : 6000Wp
PV Input Voltage (Voc) max. (±2%)	25V/45V	25V/45V	105V	200V	250V
PV Start-up voltage (±2%)	15V/30V	15V/30V	60V	120V	150V
PV Recovery Voltage (±2%)	17V/34V	17V/34V	68V	136V	170V
Maximum PV Input current	20A	40A	40A	50A	50A
Operation PV input voltage (±2%)	22.5V/45V	22.5V/45V	90V	180V	225V
Efficiency	>95%				
Protection	Battery reverse polarity, battery reverse current, high voltage cutoff, SPV reverse polarity, short circuit, low voltage cutoff, over temp.				
Float Voltage (±2%)	14V/28V	14V/28V	56V	112V	140V
Bulk Voltage (±2%)	14.6V/29.2V	14.6V/29.2V	58.4V	116.8V	146V
Equalize Voltage (±2%)	14.9V/29.8V	14.9V/29.8V	59.6V	119.2V	149V
Absorption Voltage (±2%)	14.2V/28.4V	14.2V/28.4V	56.8V	113.6V	142V
Mains connect when solar not available	At Any Battery Voltage				
Mains disconnect when battery 100% charged (±2%)	>13.8V/27.6V	>13.8V/27.6V	>55.2V	>110.4V	>138V
Mains reconnect when insufficient solar power (±2%)	<11.8V/23.6V	<11.8V/23.6V	<47.2V	<94.4V	<118V
Operating temperature	0°C to 60°C				
Storage temperature	20°C to 60°C				
Battery charging regulation	4 stage (Bulk/Absorption/float/Equalizer)				
Ingress Protection	IP-20				
Display Parameter	Battery voltage, battery current, SPV voltage, SPV current, Mode selection (Auto/Manual), load on solar, load on grid, grid fail, saving -kWh, solar status: high, low, overload, overheat				
Size (L X W X H) mm	202 X 183 X 90	202 X 183 X 90	202 X 183 X 90	288 X 215 X 118	288 X 215 X 118
weight (Kg)	1.65	1.65	1.65	3.2	3.2

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