



SUKHILA'S CHARGE CONTROLLER AND SOURCE SELECTOR

(An ISO 9001-2008 & 14001-2004 Certified Company)

Solar Photovoltaic (SPV) Charge Controller: SPE -SCC-SS -4X/6X - xxV - xxA

Reliable alternative energy applications

- Microcontroller based MPPT to get maximum SPV Array power
- Three stage charging: bulk, absorption & float
- Temperature Compensation to extend the battery life
- LCD display with Voltage, Current, Watt, WH measurements
- LED Status indicators
- Ground Fault detector to minimize the electric shock hazard
- High Efficiency and high reliability
- High life cycle, durable and rugged, Powder coated MS enclosure
- Protections: High Temperature, Reverse Polarity, Over voltage, Under voltage, Over Load, Back feed, Ground Fault & No Battery
- RS 232 communication interface (optional)



Key Market Segments & Applications

- Roof top solar applications
- Battery charger for small power requirements
- Reduces power bills and provides independence
- Compatible with existing inverters, to add solar (SPV) power for small homes and businesses in rural & urban areas.
- Best alternative during power failures.

Specification - SPV Charge Controller and Source Selector

	4x solar charge controller						6x solar charge controller			
Model	96V-60A	110V-50A	120V-50A	144V-40A	192V-50A	240V-40A	12V-80A	24V-75A	36V-60A	48V-60A
Nominal Solar PV Voltage, DC	84-96V	84-96V	96-108V	120V	156-168V	204-216V	12V	24V	36V	48V
Maximum charging current	60A	50A	50A	45A	40A	40A	80A	75A	60A	60A
Max. PV array open circuit V	176VDC	176VDC	198VDC	220VDC	308VDC	396VDC	12V	24V	36V	48V
Nominal Battery voltage, DC	96V	110V	120V	144V	192V	240V	35VDC	55VDC	75VDC	100VDC
Maximum voltage drop	1.0V	1.0V	1.0V	1.0V	1.0V	1.0V	0.8V	0.8V	0.8V	0.8V
VRLA Battery Float voltage	108V	123.8V	135V	162V	216V	270V	13.5V	27V	40.5V	54V
LMLA/Flooded Batt. Float V	110.4V	126.5V	138V	165.6V	220.8V	276V	13.8V	27.6V	41.4V	55.2V
VRLA Battery Boost voltage	110.4V	126.5V	138V	165.6V	220.8V	276V	13.8V	27.6V	41.4V	55.2V
LMLA/Flooded Battery Boost V	113.6V	130.2V	142.0V	170.4V	227.2V	284.0V	14.2V	28.4V	42.6V	56.8V
Flooded Battery Equalize Voltage	121.6V	139.3V	152.0V	182.4V	243.2V	304.0V	15.2V	30.4V	45.6V	60.8V
Efficiency	>99%	>99%	>99%	>99%	>99%	>99%	>99%	>97%	>98%	>99%
Battery Temp. Compensation	3 mV per °C per Cell (For VRLA, between 2.15V to 2.33V only)									
Status indication	LCD: Voltage, Current, Wattage & WH of PV, Battery Voltage & Charge Current, Faults, Temp. LED: Output (Red), SPV (Amber), Alternate Source (Red), Battery Charge (Green), Temp. (Red)									
Protections	Under voltage, Over voltage, Battery high/Low, Output high, Over load, Battery Reverse polarity, Over temperature, Back feed, Ground Fault Detection									
Cooling	Natural / Convection									
Operating temperature	0 – 50°C ambient									
Operating humidity	95% (+1% -5%)									
Over current protection	> 105%									
Over-temperature protection	> 80°C									
Over Load protection	Circuit breaker/Fuse at Input									
SPV/Load /Battery Connections	Terminal Block									
Cable entry	Bottom / Front end									
Surge Immunity	Level 4 as per IEC 61000-4-5									
Weight in Kg. (approximately)	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Dimensions in mm H x W x L	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176	61x138.5x176
Construction	Powder coated mild steel enclosure									
Color	Black with matt finish									
Mounting	Panel / Wall mount									

Compatible with various types of batteries like Flooded, Sealed (Gel), Absorbed glass mat, Maintenance free (RV or Marine), Lead-Calcium (Pb-Ca), Nickel-Cadmium and Nickel-Iron.

Sukhila Power Electronics reserves the right to make changes to the product described without notice. No liability is assumed as a result of its use nor for any infringement on the rights of others.

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