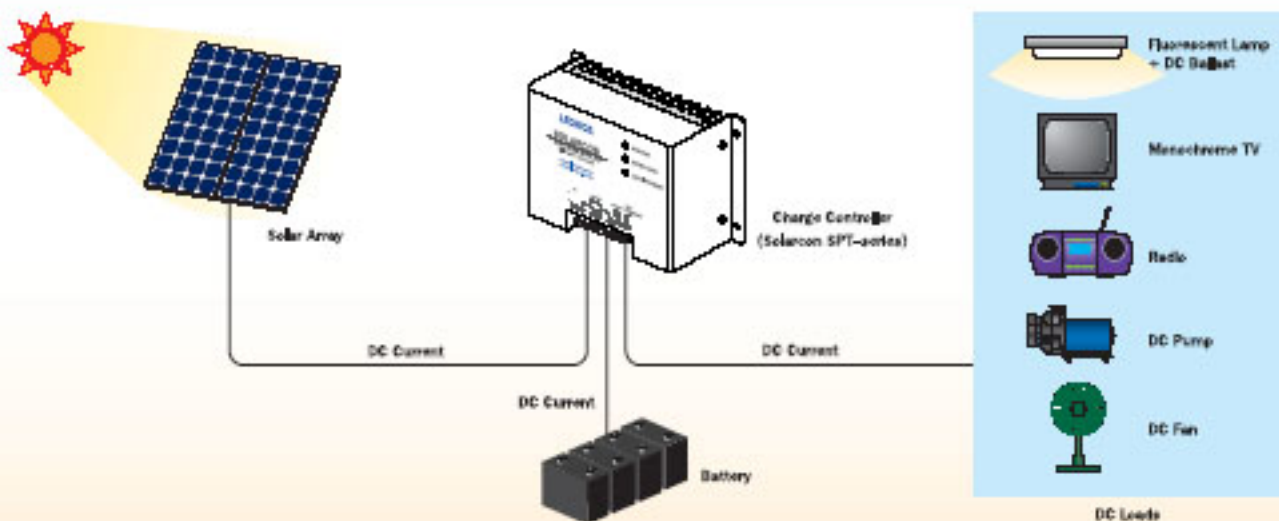


SOLARCON SPT

SOLAR CHARGE CONTROLLER WITH MPPT AND TIMER



- Advanced microprocessor control
- Buck regulator wide input range
- Maximum Power Point Tracking (MPPT)
- Solar charge controller with DC load control
- 3 Step charging to provide quick and safe charging for battery
- Temperature compensation (-3 to -7 mV/cell/celsius)
- Reverse polarities protection for PV and battery
- Over charge and over discharge protection
- Lightning surge protect
- Capable to use with high V_{mp} PV (A-Si PV)
- 7 modes timer control (ON/OFF DC load) selectable
- Automatic cooling fan (outside enclosure)
- ISO 9001 and ISO 14001 certified



Where power demand is small and a stand alone power system is needed, the DC-Solar System is a good solution. Particularly suitable for small households, religious retreats, security outposts, small schools and remote clinics the DC-Solar System can provide reliable power for DC appliances such as lights, radio, TV, fans and pumps. And built-in Maximum Power Point Tracking (MPPT) to maximize power generated by solar modules (PV). It can supply 10 A maximum DC current to DC load. SPT-series also provide 7 modes of timer operation for control ON/OFF DC load.

SPECIFICATIONS

MODEL		SPT-1206	SPT-1212	SPT-1220	SPT-1230	SPT-2420	SPT-2430	SPT-4810	SPT-4820	SPT-4830	
PV INPUT	Maximum input power (W_p)	80 W_p	160 W_p	240 W_p	400 W_p	520 W_p	800 W_p	520 W_p	1000 W_p	1600 W_p	
	Maximum open circuit voltage (V_{oc})	96Vdc							192 Vdc		
	MPPT tracking voltage range (V_{mp})	26 - 75 Vdc					30 - 75 Vdc		65 - 150 Vdc		
DC OUTPUT TO BATTERY (at 25 °C)	Nominal battery voltage	12 Vdc				24 Vdc		48 Vdc			
	Boost charging voltage (VRLA / LA)	14,2 V \pm 0,2 / 14,5 V \pm 0,2				28,4 V \pm 0,4 / 29,0 V \pm 0,4		56,8 V \pm 0,8 / 58,0 V \pm 0,8			
	Float charging voltage (VRLA / LA)	13,5 V \pm 0,2 / 13,6 V \pm 0,2				27,0 V \pm 0,4 / 27,2 V \pm 0,4		54,0 V \pm 0,8 / 54,4 V \pm 0,8			
	Low battery disconnect voltage	10,8 V \pm 0,2				21,6 V \pm 0,4		43,2 V \pm 0,8			
	Battery reconnection voltage	12,5 V \pm 0,2				25,0 V \pm 0,4		50,0 V \pm 0,8			
	Maximum charging current (A)	6 A	12 A	20 A	30 A	20 A	30 A	10 A	20 A	30 A	
DC LOAD CONTROL	Nominal voltage	12 V				24 V		48 V			
	Maximum current	10 A									
	Protection	Over voltage disconnected and short circuit (Type electronics switch not moving parts and no contact surface)									
PROTECTION		High battery voltage / Overcharge and overdischarge									
		PV transient voltage surge									
		PV reverse polarity / Battery reverse polarity									
	Approx. Power Consumption	less than 25 mA					less than 35 mA				
INDICATOR	LED	Charging (green), Battery status (yellow), Low battery / Low voltage disconnect (red)									
BATTERY	Type (Selectable)	Sealed Lead Acid (VRLA) or Lead Acid (LA)									
VENTILATION	Automatic cooling fan (outside enclosure)	no	no (option)	no (option)	yes	no (option)	yes	no (option)	no (option)	yes	
OPERATING CONDITION	Temperature	0 - 45°C									
	Relative humidity	0 - 95 % (non-condensing)									
DIMENSION	W x H x D (mm.)	160 x 92 x 65			187 x 210 x 105				-		
WEIGHT	Approximate in kg.	0,9			3				-		