

SOLARCON SPT

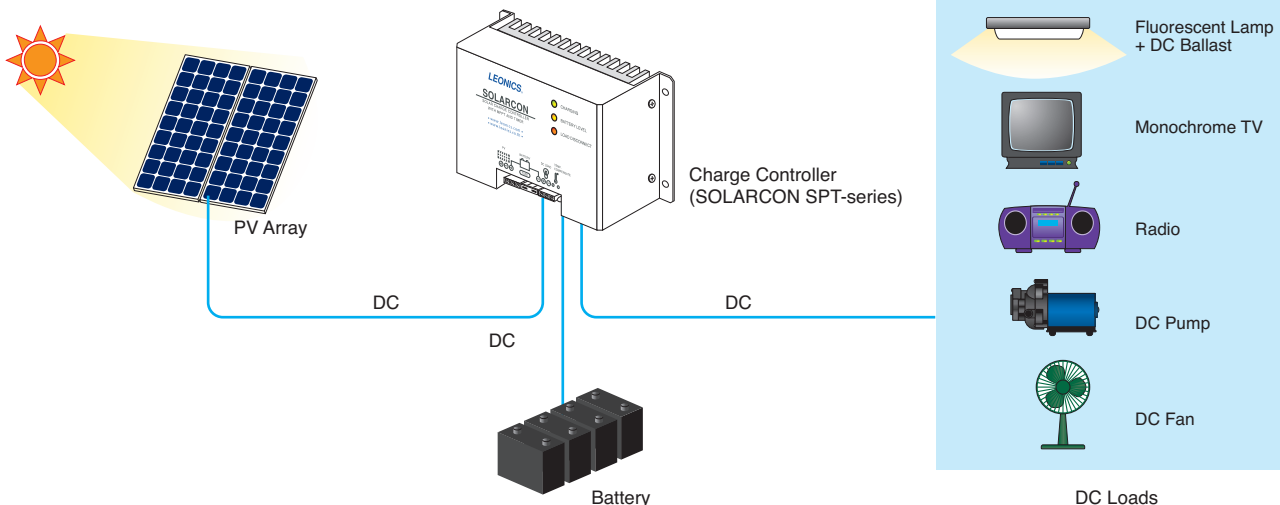
MPPT Charge Controller with DC Load Timer 10A



- 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 (-5 to -7 mV/cell/celsius)
- Reverse polarities protection for PV and battery
- Capable to use with high Vmp PV (a-Si PV)
- Over charge and over discharge protection
- 7 modes timer control (ON/OFF DC load) selectable
- Automatic cooling fan (outside enclosure)

- Lightning surge protection
- Comply with CISPR11 Class B Standard (option)
- C-tick compliance for EMC
- ISO 9001, ISO 14001 and ISO 45001 certified factory

Timer Mode	DC Load Status	
	Sunrise	Sunset
0	OFF —————→	ON 4hrs. OFF —————→
1	OFF —————→	ON 4 hrs. - OFF 5hrs.- ON —————→
2	OFF —————→	ON —————→
3	OFF —————→	Blink (for Obstruction light)
4	ON 4 hrs - OFF —————→	
5 (default)	ON —————→	
6	ON —————→	OFF —————→



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 PV modules. It can supply 10 Amp maximum DC current to DC load. The SOLARCON SPT-series also provide 7 modes of timer operation for control ON/OFF DC load such as street light, garden light, gate light, etc.

SOLARCON SPT-series MPPT Charge Controller with DC Load Timer 10 A

SPECIFICATIONS

MODEL		SPT-1206	SPT-1212	SPT-1220	SPT-1230	SPT-1245	SPT-2412	SPT-2420	SPT-2430	SPT-2445	SPT-4812	SPT-4820	SPT-4830	SPT-4845
PV INPUT	Maximum input power	80 W	160 W	240 W	400 W	600 W	320 W	520 W	800 W	1,200 W	520 W	1,000 W	1,600 W	2,300 W
	Maximum open circuit voltage (Voc)	96 Vdc					96 Vdc				192 Vdc			145 Vdc
	MPPT voltage range (Vmp)	26 - 75 Vdc					40 - 75 Vdc				80 - 150 Vdc			65 - 120 Vdc
DC OUTPUT TO BATTERY (at 25°C)	Nominal battery voltage	12 Vdc					24 Vdc				48 Vdc			
	Boost charging voltage (VRLA*/ LA)	14.2 Vdc ± 0.2 / 15.0 Vdc ± 0.2					28.4 Vdc ± 0.4 / 30.0 Vdc ± 0.4				56.8 Vdc ± 0.8 / 60.0 Vdc ± 0.8			
	Float charging voltage (VRLA*/ LA)	13.5 Vdc ± 0.2 / 13.8 Vdc ± 0.2 /					27.0 Vdc ± 0.4 / 27.6 Vdc ± 0.4				54.0 Vdc ± 0.8 / 55.2 Vdc ± 0.8			
	Low battery disconnect voltage	10.8 Vdc ± 0.2					21.6 Vdc ± 0.4				43.2 Vdc ± 0.8			
	Battery reconnection voltage	12.5 Vdc ± 0.2					25.0 Vdc ± 0.4				50.0 Vdc ± 0.8			
	Maximum charging current	6 A	12 A	20 A	30 A	45 A	12 A	20 A	30 A	45 A	12 A	20 A	30 A	45 A
DC LOAD CONTROL	Nominal voltage	12 Vdc					24 Vdc				48 Vdc			
	Maximum current	10 A				40 A	10 A				10 A			
	Protection	Over voltage disconnect and short circuit (Type electronics switch not moving parts and no contact surface)												
BATTERY	Type (selectable)	Sealed lead acid (VRLA) (default)* or Deep cycle lead acid (LA)												
PROTECTION		High battery voltage, Over charge and over discharge, PV transient vottage surge, PV reverse polarity, Battery reverse polarity												
	Approximate power consumption	< 25 mA									< 35 mA			
INDICATOR	LED	Charging (green), Battery status (yellow), Low battery / Low voltage disconnect (red)												
VENTILATION	Automatic cooling fan (outside enclosure)	no	no	no	yes	yes	no	no	yes	yes	no	yes	yes	yes
OPERATING CONDITION	Temperature	0 - 45°C												
	Relative humidity	0 - 95 % (non-condensing)												
DIMENSION	W x H x D (cm.)	160x92x65	192 x 210 x 115			192x235x115	192 x 210 x 115			192x235x115	192 x 210 x 115			192x235x115
WEIGHT	Approximate in kg.	0.9	2.8		3.0	3.8	2.8		3.0	3.8	2.8	3.0		3.8

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

* The factory default setting is for sealed lead acid (VRLA) battery. For use with deep cycle battery (LA), please inform us when order product.

Authorized Distributor

LEO ELECTRONICS CO.,LTD.

27, 29 Soi Bangna-Trad Rd 34, Bangna Tai, Bangna, Bangkok 10260 THAILAND
Phone. 0-2746-9500, 0-2746-8708 Fax. 0-2746-8712 e-mail : RNE@leonics.com

■ www.leonics.com ■

Authorized Dealer