

## SOLARCON SCM

### MPPT Charge Controller



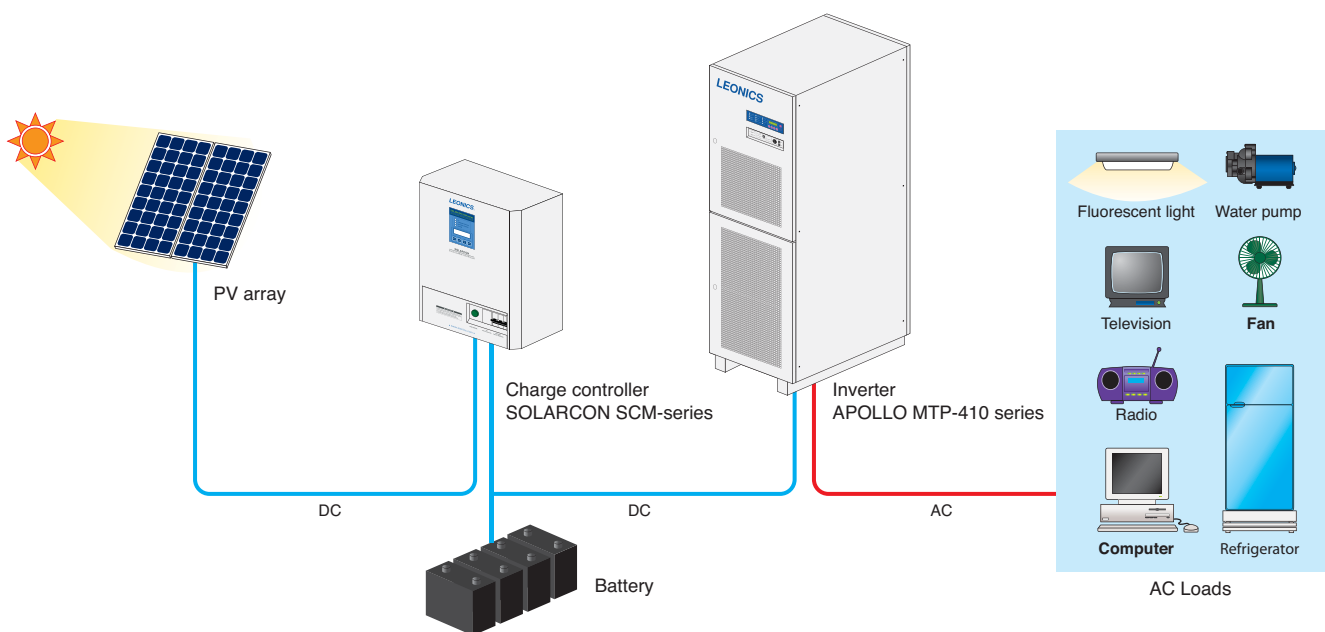
Wall mount type

- Lightning surge protection
- Automatic cooling fan (outside enclosure)
- Comprehensive LED indication and LCD display
- Power and event data logger
- Reverse PV polarity protection and alarm (option)
- Wall mount or Rack mount 5U and 6U Case
- 2 years warranty (option for 3 and 5 years)
- ISO 9001 and ISO 14001 certified factory

- Advanced microprocessor control
- Maximum Power Point Tracking (MPPT)
- Boost regulator wide input range
- Automatic ON-OFF
- 3-step charging to provide quick and safe charging for battery
- Battery reverse polarity alarm
- Over charge and over discharge protection



Rack mount type



The SOLARCON SCM-series charge controller is the most sophisticated solar charger with PV Maximum Power Point Tracking (MPPT) algorithm. The charge controller equipped with advanced microprocessor control to get the maximum power from PV to charge battery with LCD display and front panel for easy and accurate setting more over the digital meter with 180 days power and event logger are inclusive

# LEONICS® SOLARCON SCM-series MPPT Charge Controller



## SPECIFICATIONS

Wall Mount/Tower Model	SCM-12035	SCM-12070	SCM-120105	SCM-120140	SCM-24035	SCM-24070	SCM-240105	SCM-240140	SCM-360200	SCM-360300	SCM-360400	SCM-480150	SCM-480200	SCM-480300	
Rack Mount Model	SCM-12035/RM	SCM-12070/RM	SCM-120105/RM		SCM-24035/RM	SCM-24070/RM	SCM-240105/RM	SCM-240140/RM							
INPUT (Configuration of PV in series within these voltage range)															
V <sub>mp</sub> of PV*	85 - 110 Vdc				170 - 220 Vdc				255 - 330 Vdc			340 - 440 Vdc			
Tracking voltage range	48 - 110 Vdc				96 - 220 Vdc				144 - 330 Vdc			192 - 440 Vdc			
V <sub>oc</sub> of PV*	< 138Vdc				< 276 Vdc				< 414 Vdc			< 552 Vdc			
Maximum current	35 A	70 A	105 A	140 A	35 A	70 A	105 A	140 A	200 A	300 A	400 A	150 A	200 A	300 A	
Maximum PV power**	3.4 kWp	6.88 kWp	10.3 kWp	13.7 kWp	6.88 kWp	13.7 kWp	20.6 kWp	27.5 kWp	61 kWp	91 kWp	122 kWp	60.6 kWp	82.6 kWp	121.1 kWp	
OUTPUT (at 25°C)															
Nominal battery voltage	120 Vdc				240 Vdc				360 Vdc			480 Vdc			
Boost charging voltage	130.0 - 150.0 Vdc				260.0 - 300.0 Vdc				390.0 - 450.0 Vdc			520.0 - 600.0 Vdc			
Float charging voltage	120.0 - 140.0 Vdc				240.0 - 280.0 Vdc				360.0 - 420.0 Vdc			480.0 - 560.0 Vdc			
Low voltage alarm	100.0 - 120.0 Vdc				200.0 - 240.0 Vdc				300.0 - 360.0 Vdc			400.0 - 480.0 Vdc			
Low voltage cut off (signal)	99.0 - 119.0 Vdc				198.0 - 238.0 Vdc				297.0 - 357.0 Vdc			396.0 - 476.0 Vdc			
Reconnect voltage (signal)	115.0 - 135.0 Vdc				230.0 - 270.0 Vdc				345.0 - 405.0 Vdc			460.0 - 540.0 Vdc			
BATTERY															
Type	Deep cycle lead acid (LA)														
EFFICIENCY															
Charger peak efficiency	> 98%														
PROTECTION															
Protection	PV transient voltage surge, High battery voltage, Low battery voltage, Over temperature, Over charging														
Alarm	Battery reverse polarity														
INDICATOR															
LED	Battery level, PV voltage level, Operation status, Alarm														
LCD	Digital meter, 180 days power and event logger														
COMMUNICATION INTERFACE															
RS-232	DB-9 connector														
RS-485	Operate with RS-485 adaptor (option)														
Dry contact signal	Charger fail and low battery voltage disconnected														
SYSTEM															
Control	Automatic cooling fan, Maximum Power Point Tracking (MPPT)														
Temp. compensation range	-5 to 7 mV / cell / celsius (option)														
OPERATING CONDITION															
Temperature	0 - 45°C														
Relative humidity	0 - 95% (non-condensing)														
DIMENSION (W x H x D) (approximate in cm.)															
Wall mount case	42 x 53 x 24		50 x 64 x 26.6		42 x 53 x 24		50 x 64 x 26.6								
Rack mount case	48.2 x 22.2 x 64.5 (5U)		48.2x28.2x64.5(6U)		48.2 x 22.2 x 64.5 (5U)		48.2 x 28.2 x 64.5 (6U)								
Tower case									60 x 210 x 100			60 x 210 x 100			
WEIGHT (approximate in kg.)															
Wall mount case	24	27	40	48	23	30	34	38	-	-	-	-	-	-	
Rack mount case	25	28	41	-	24	31	37	40	-	-	-	-	-	-	
Tower case									361	414	467	400	419	460	

\*The V<sub>mp</sub> and V<sub>oc</sub> used for configuration must be considered with temperature coefficient effected by environment at each install location. \*\*For operation of charge controller at ambient temperature ≤ 25°C. The peak PV power must be derated 15% when charge controller operates at ambient temperature over than 25°C. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

Authorized Distributor

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