LEONICS®

SOLARCON SCM

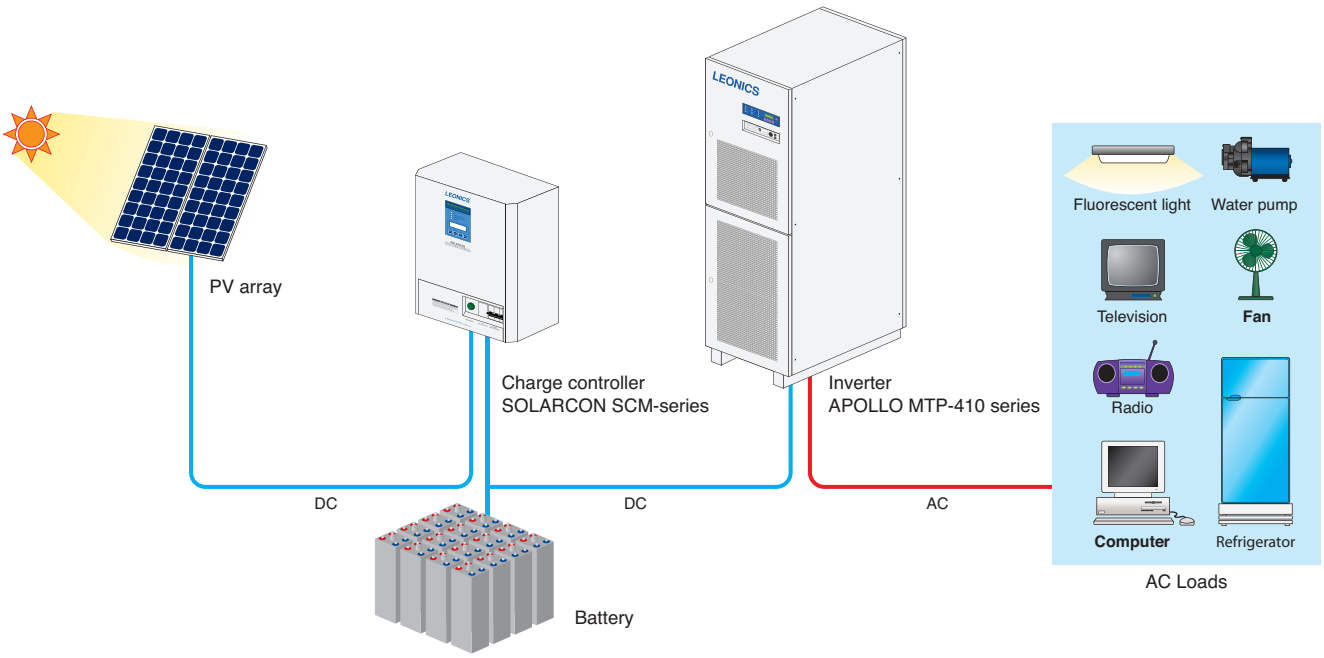
MPPT Charge Controller

Wall mount type

- 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, Rack mount (5U and 6U) and Tower Case
- IP30 protection enclosure (IP31 protection enclosure is optional)
- 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
- Lightning surge protection

Rack mount type



The SOLARCON SCM-series charge controller is the most sophisticate 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

AC Solar Power System

LEONICS® SOLARCON SCM-series MPPT Charge Controller

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_{mp} 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_{oc} 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	61.95 kWp	91 kWp	124 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)													
ENVIRONMENT														
Temperature	0 - 45˚C													
Relative humidity	0 - 95% (non-condensing)													
Pollution degree classification	III													
Max. operating altitude	2,000 m / 6,560 feet (without derating)													
DESIGN REGULATION														
Standard	IEC 61683 (for efficiency test), IEC 62109-1													
Ingress protection	IP30 (IP31 is optional)													
Protective class	I													
Overvoltage category	II (input and output) (in accordance with IEC 62109-1)													
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 / Rack mount case	24kg / 25kg	27kg / 28 kg	40kg / 41kg	48kg / -	23kg / 24kg	30kg / 31kg	34kg / 37kg	38kg / 40kg	-	-	-	-	-	-
Tower case									361	414	467	400	419	460

*The Vmp and Voc 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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