

SOLARCON SCB

MPPT Charge Controller

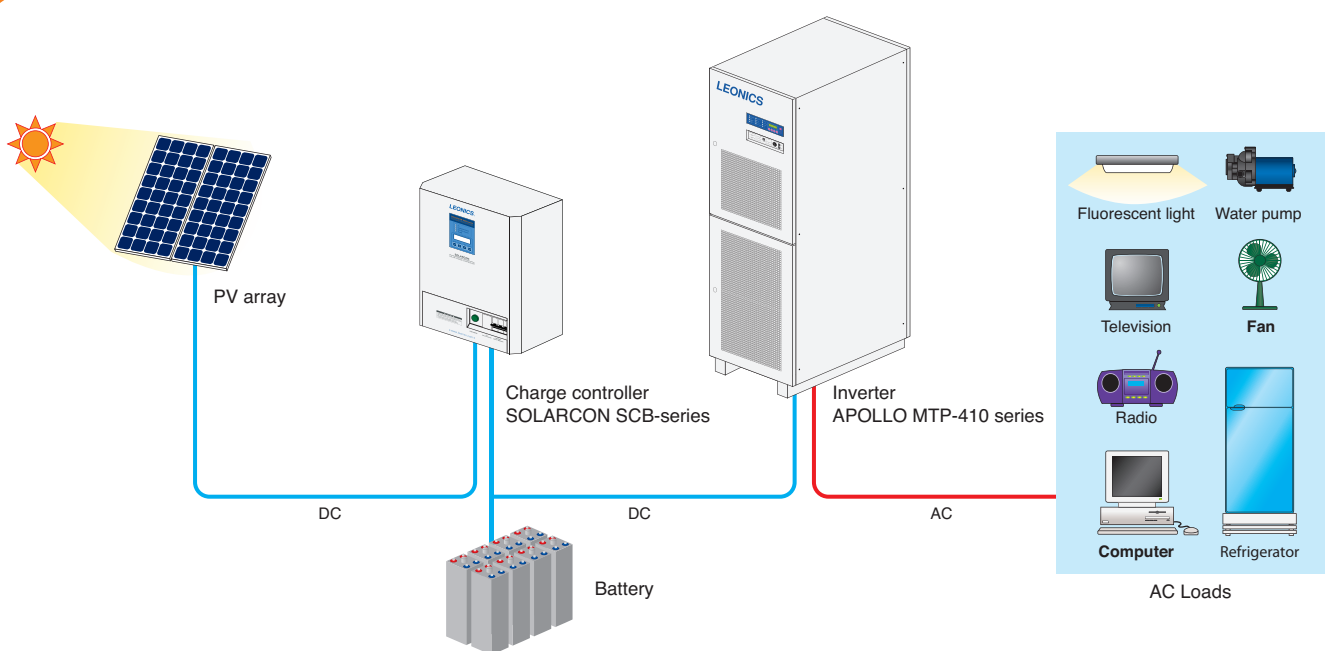


Wall mount type



Rack mount type

- Advanced microprocessor control
- Maximum Power Point Tracking (MPPT)
- Buck regulator wide input range
- 3-step charging to provide quick and safe charging for battery
- Compatible with sealed lead acid (default), lead acid, Li-Ion (NMC, LFP) and SoNick batteries
- Battery reverse polarity alarm
- Over charge and over discharge protection
- Lightning surge protection
- Automatic cooling fan (outside enclosure)
- Comprehensive LED indication and LCD display
- Power and event data logger
- PV ground fault detection/protection (option)
- Reverse PV polarity protection and alarm (option)
- IP30 protection enclosure (IP31 is optional)
- Wall mount or Rack mount 5U and 6U Case
- 2 years warranty (option for 3 and 5 years)
- ISO 9001, ISO 14001 and ISO 45001 certified factory



The SOLARCON SCB-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 SCB-series MPPT Charge Controller



Wall Mount Model	SCB-2440	SCB-2480	SCB-24120	SCB-4860(L)	SCB-48120(L)		SCB-12030	SCB-12060	SCB-12090
Rack Mount Model	SCB-2440/RM	SCB-2480/RM	SCB-24120/RM	SCB-4860(L)/RM	SCB-48120(L)/RM	SCB-48200/RM	SCB-12030/RM	SCB-12060/RM	SCB-12090/RM
INPUT (Configuration of PV in series within these voltage range)									
V _{mp} of PV*	35 - 74 Vdc			64 - 116 Vdc			154 - 232 Vdc		
V _{oc} of PV*	≤ 90 Vdc			≤ 145 Vdc			≤ 290 Vdc		
Maximum PV power**	1.1 kWp	2.2 kWp	3.3 kWp	3.3 kWp	6.6 kWp	11 kWp	4.13 kWp	8.26 kWp	12.4 kWp
OUTPUT (at 25°C)									
Nominal battery voltage	24 Vdc			48 Vdc			120 Vdc		
Boost charging voltage	26.0 - 30.0 Vdc (default = 30.0 Vdc)			52.0-60.0 Vdc (default = 60.0 Vdc)			130.0 - 150.0 Vdc (default = 150.0 Vdc)		
Float charging voltage	24.0 - 28.0 Vdc (default = 27.6 Vdc)			48.0-56.0 Vdc (default = 55.2 Vdc)			120.0 - 140.0 Vdc (default = 138.0 Vdc)		
Low voltage alarm	20.0 - 24.0 Vdc (default = 23.6 Vdc)			40.0-48.0 Vdc (default = 47.2 Vdc)			100.0 - 120.0 Vdc (default = 118.0 Vdc)		
Low battery voltage disconnected	19.8 - 23.8 Vdc (default = 21.6 Vdc)			39.6-47.6 Vdc (default = 43.2 Vdc)			99.0- 119.0 Vdc (default = 108.0 Vdc)		
Reconnect voltage	23.0 - 27.0 Vdc (default = 25.0 Vdc)			46.0-54.0 Vdc (default = 50.0 Vdc)			115.0 - 135.0 Vdc (default = 125.0 Vdc)		
Maximum charging current	40 A	80 A	120 A	60 A	120 A	200 A	30 A	60 A	90 A
BATTERY									
Type	Sealed lead acid (VRLA) (default), Deep cycle lead acid (LA), Li-Ion (NMC, LFP), SoNick								
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, 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 21		-	42 x 53 x 24		50 x 64 x 26.6
Rack mount case	48.2 x 22.2 x 64.5 (5U)		48.2 x 28.2 x 64.5 (6U)	48.2 x 22.2 x 64.5 (5U)	48.2 x 28.2 x 64.5 (6U)	48.2 x 28.2 x 64.5 (6U)	48.2 x 22.2 x 64.5 (5U)		48.2 x 28.2 x 64.5 (6U)
WEIGHT (approximate in kg.)									
Wall mount case	10	25	35	20	22.5	-	23	23	40
Rack mount case	10	25	30	21	23.5	23.5	24	25	40

*The V_{mp} and V_{oc} 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. ***For SOLARCON SCB-XXXX(L) model, it has only input and output terminal blocks. ****For SOLARCON SCB-240200RM and SCB-240320RM, it will not provide the circuit breaker on the unit. Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.

Authorized Distributor

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