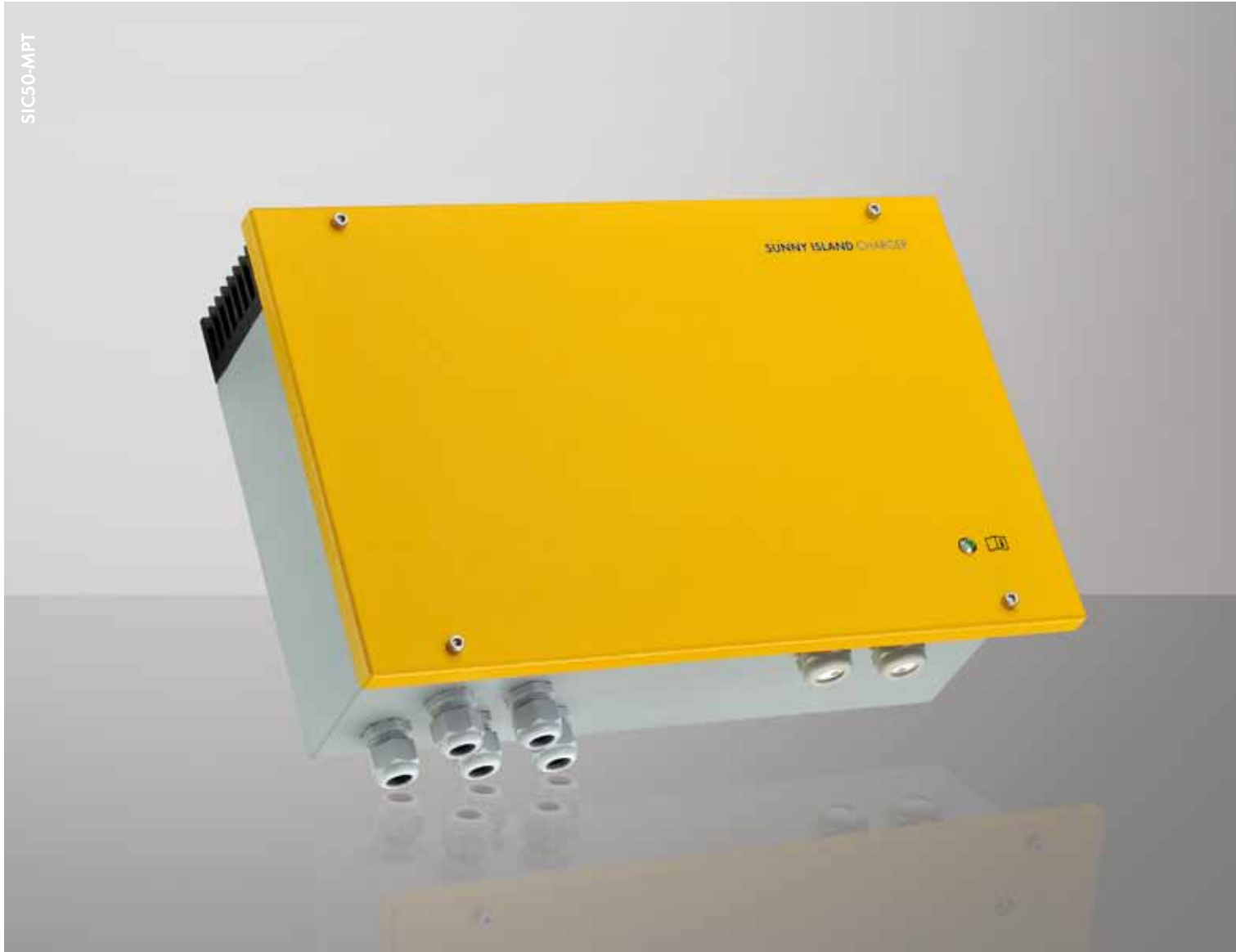


SUNNY ISLAND CHARGER 50

SIC50-MPT



Flexible

- For 12 / 24 / 48 V
- Parallel connection of up to four devices
- Modular and expandable

Easy to use

- Easy installation and commissioning
- Operation and configuration via Sunny Island (Single Point of Operation)

Efficient

- Active MPP tracking
- Efficiency > 98 %

Durable

- Outdoor installation possible due to IP65
- Without fan
- Nominal power up to 40 °C
- 5-year SMA warranty

SUNNY ISLAND Charger 50

DC coupling from SMA: now with 20 % more power

AC and DC coupling in perfect interaction and from a single manufacturer: the all-purpose Sunny Island Charger 50 by SMA. Its broad DC input voltage range makes configuration possible for almost any PV module. Thanks to the integrated MPP tracking system, the charger guarantees an energy yield between 15 to 30 percent higher than that of conventional shunt charge controllers. Unique in charge controllers of this power range: the high protection rating, fanless operation and broad temperature range enable its use even under extreme climatic conditions. Easy installation and automatic control through the Sunny Island make commissioning entirely foolproof.

Technical data	Sunny Island Charger 50		
	12 V	24 V	48 V
Input (PV generator)			
Max. PV power	630 W	1250 W	2400 W
Max. DC voltage	140 V DC	140 V DC	140 V DC
Optimal MPPT voltage range	25 V - 60 V	40 V - 80 V	70 V - 100 V
Number of MPP trackers	1	1	1
Max. PV current	40 A	40 A	40 A
Output (battery)			
Nominal DC power up to 40 °C	600 W	1200 W	2400 W
Nominal battery voltage	12 V	24 V	48 V
Nominal voltage range	8 V - 15.6 V	16 V - 31.5 V	36 V - 65 V
Battery type	VRLA batteries		
Max. charging current / continuous charging current	50 A / 50 A	50 A / 50 A	50 A / 50 A
Charge control	IUoU	IUoU	IUoU
Efficiency			
Max. efficiency	98 %	98 %	98 %
Euro ETA	97.3 %	97.3 %	97.3 %
Device protection			
DC reverse polarity	●	●	●
Short circuit strength	●	●	●
Overload protection	●	●	●
Over- and undervoltage protection	●	●	●
Over- and undertemperature protection	●	●	●
General data			
Dimensions (W / H / D) in mm	421 / 310 / 143	421 / 310 / 143	421 / 310 / 143
Gewicht	10 kg	10 kg	10 kg
Protection class (according to IEC 60529)	IP65	IP65	IP65
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Air humidity	0 % - 100 %	0 % - 100 %	0 % - 100 %
Daytime operating consumption	< 5 W	< 5 W	< 5 W
Nighttime operating consumption	< 3 W	< 3 W	< 3 W
Features and functions			
Display	multicolored LEDs	multicolored LEDs	multicolored LEDs
Configuration	Plug and play in combination with SI5048, SI2224, SI2012 (Sync Bus Piggy Back required) DIL switch with stand-alone applications		
Parallel operation	Up to 4 devices	Up to 4 devices	Up to 4 devices
Interface: Sync Bus Piggy-Back	○	○	○
External temperature sensor (KTY type)	○	○	○
Warranty: 5 / 10 / 15 / 20 / 25 years	●/○/○/○/○	●/○/○/○/○	●/○/○/○/○
Certificates and approvals	CE	CE	CE
<p>● Standard features ○ optional – not available</p> <p>Last updated: March 2011</p>			
Type designation	SIC50-MPT	SIC50-MPT	SIC50-MPT

