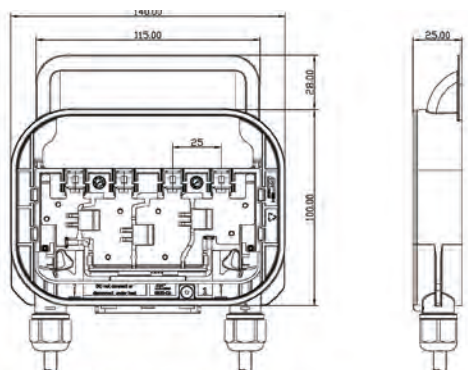
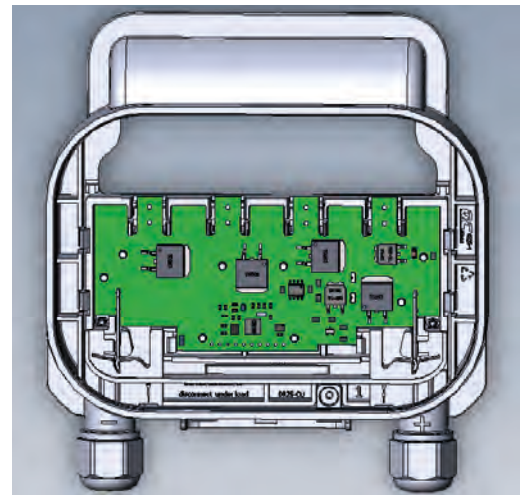


SunSniffer

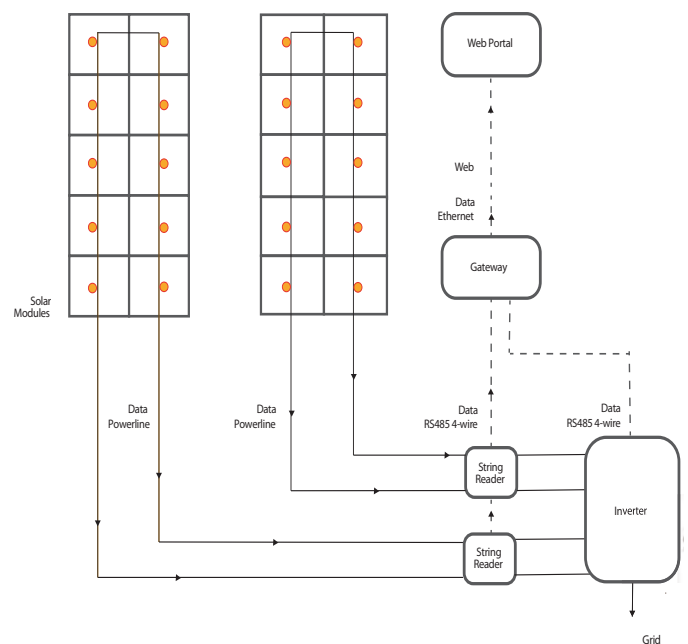
RAPID SHUT DOWN

in compliance with SunSpec Alliance specifications

In total compliance with the newly released SunSpec Alliance specifications regarding rapid shut down solutions for pv plants, the SunSniffer junction box RAPID SHUT DOWN made by QC Solar integrates not only a sensor measuring voltage and temperature of each module/junction box, but shuts the module down immediately if necessary. Data are sent via smart Powerline communication (existing DC cabling).



Picture 1. Junction box dimensions.



Picture 2. SunSniffer Technology Scheme

SunSniffer RAPID SHUT DOWN

JUNCTION BOX TECHNICAL SPECIFICATIONS:

Terminals for ribbons	4
Rated current (J/D)	14.5 A / 30 A
Rated voltage	IEC 1000V / UL 600V
Reverse current	25 A
Dimensions (L*W*H)	140*128*25 mm
Temperature range	-40°C~85°C
Cable size	4.0, 6.0 mm ² / 12,10 AWG
Ribbons size	max 8 mm
Protection degree	IP65
Flammable class	5VA

SENSOR TECHNICAL SPECIFICATIONS:

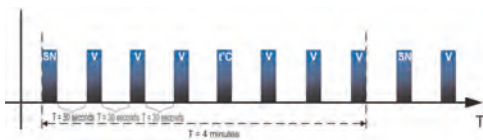
Working voltage	10 ~ 50 ± 0.2 V
Maximum output voltage at shutdown mode	<1 V
Maximum shutdown delay	30 sec
Maximum turn-on delay	30 sec
Temperature	-40 ~ + 85 ± 1 °C
Current consumption	≤ 10 mAmp
Serial Number length (SN)	30 bit
Data transmission interval (T) , including:	30 ± 0.4 sec
- Temperature transmission interval (T _{TC})	4 ± 0.4 min
- SP full serial number transmission interval (T _{SNfull})	4 ± 0.4 min
- Voltage transmission interval (T _v)	30 ± 0.4 sec

Communication protocol:

Power line with S-FSK modulation

Power control mode:

Permission to operate watchdog



Picture 3. Sequence of data packets

The SunSniffer sensor transmits data with 30 seconds interval.
There are three types of data sent:
1) Module full serial number SN;
2) Module voltage V; 3) Module Temperature t°C.
The sequence is repeated every 4 minutes.
Please refer to data packet sequence below.

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Specifications in this datasheet are subject
to change without notice.

