



SunSniffer®

SunSniffer® Retrofit Box - 1500V -

The heart of the SunSniffer® technology for highly accurate detection of module data - easily retrofitted to already installed plants.

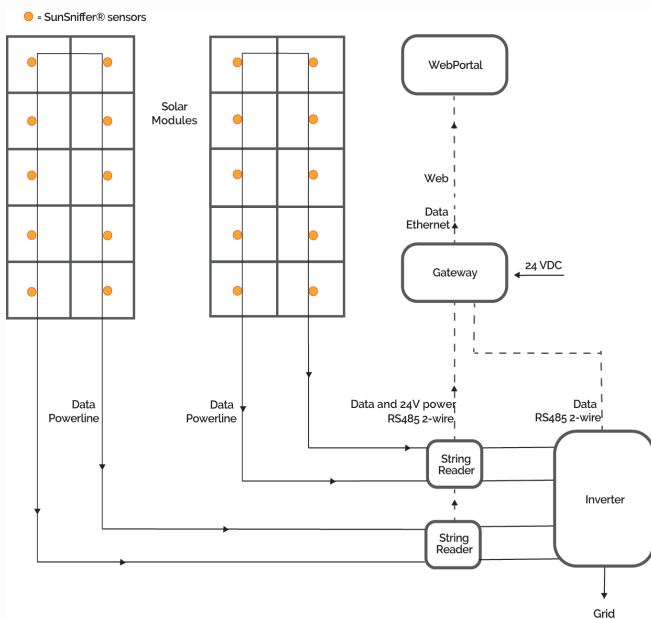


The heart of the SunSniffer® technology, the Sensor is deployed for module-level monitoring in solar panels. Installed in the special retrofitting Retrofit housing, it can easily be connected to the modules and assolves the function of telemetry data collection and transmission:

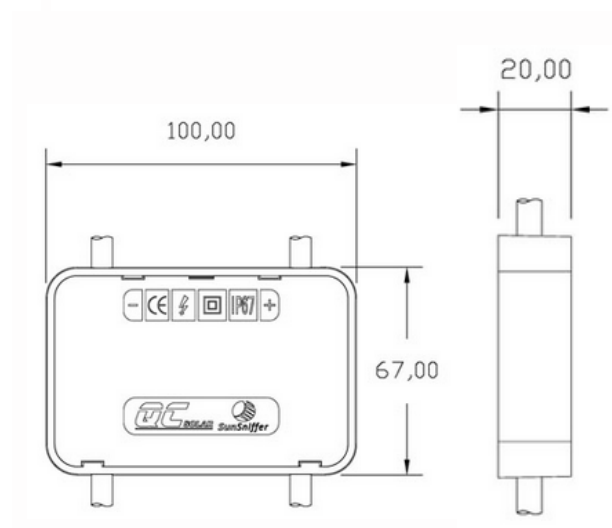
- **voltage (V)**
- **temperature (t°C)**
- **solar panel serial number**



Picture 1
SunSniffer® Retrofit box;
cable length:
2 x 5 cm, 2 x 90 cm



Picture 2. SunSniffer Technology scheme



Picture 3. SunSniffer® Retrofit housing specifications

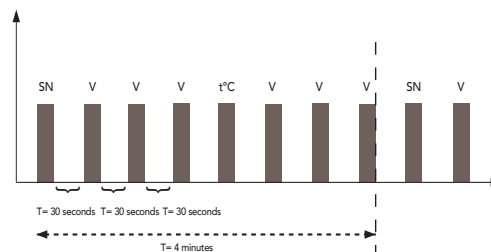
SunSniffer[®] Retrofit Box - 1500V -

HOUSING TECHNICAL SPECIFICATIONS:

Item	QC0816432
Rated current	14,5 A
Rated system voltage	1500 V
Dimensions W x L x H	67 x 100 x 20 mm
Temperature range	-40°C~ 85 °C
Cable size	4,0 mm ² / 12 AWG
Protection degree	IP 67
Flammability class	5VA
Cable length	50 mm / 900 mm
Weight	313 g
Connectors	QC4,10

SENSOR TECHNICAL SPECIFICATIONS:

Measuring voltage rev. F	12 ~ 43 ± 0,2 V
Measuring voltage rev. K	5 ~ 53 ± 0,2 V
Measurement accuracy	± 1 %
Temperature	-40 ~ + 85 ± 1 °C
Current consumption	≤ 10 mAmp
Serial Number length (SN)	30 bit
Data transmission interval (T) For sequence details please see picture 5.	30 ± 0,4 sec
Dimensions (LxWxH)	38 x 12,5 x 4 mm



Picture 4. Sequence of data packets

RETROFIT BOX INSTALLATION INSTRUCTIONS:

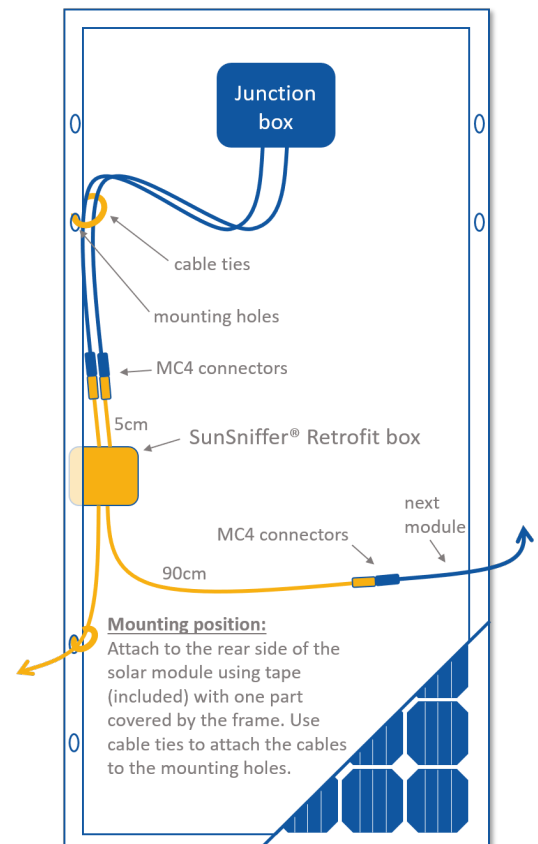
1. In the case of connecting Retrofit Boxes to a string that is already commissioned and connected to the inverter, make sure that the **inverter is turned off** and that the **string is not producing power**. Only after, Retrofit Box installation can start.
2. To ensure optimal adhesion, **clean the backside of the module where the Retrofit Box should be installed** with a suitable detergent based on the recommendations of the Module and Tape manufacturers.
3. Peel off the tape cover, and place the box on the intended position.
4. Connect the **IN connectors (SHORT cables)** of the Retrofit Box to the Module's junction box cables. Make sure that the connection is secure and the connectors are plugged in correctly.
5. Afterwards, connect the **OUT connectors (LONG cables)** of the Retrofit Boxes to the Retrofit Boxes or Modules in series with this box.
6. To make sure that the weight on the box is kept at a minimum, **use cable ties** to manage the cables and support in securing the box in place. If possible, place the box under the module frame to better assist in securing the box in place.
7. It is recommended that after all Retrofit Boxes are securely installed, turn on the inverter, and **visually check that the Retrofit Boxes are not showing any irregularities** such as smoke.

In case a Retrofit Box has to be replaced or removed, the **OUT connectors (LONG cables) should be disconnected first**. Afterwards, the IN connectors (SHORT cables) can be safely disconnected.

>>> If the above instructions are not followed, the sensors are under high risk of getting damaged, and in extreme cases, catching fire. In the unfortunate event of the Retrofit Box getting damaged, the type and severity of the damage will indicate the possible errors that caused the damage. Based on the evidence at hand, warranty terms might therefore be voided. <<<

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Picture 5. Easy and fast installation:
Just plug the Retrofit box between the modules.

>>> Attention! Plant specifications stated by the customer in the „Compatibility Sheet“ have to be followed. Any deviation will lead to loss of warranty. The installation must be carried out by a specialist. In the event of improper installation, the warranty expires and no liability is assumed. <<<