



# SunSniffer®

# SunSniffer® Gateway Plus

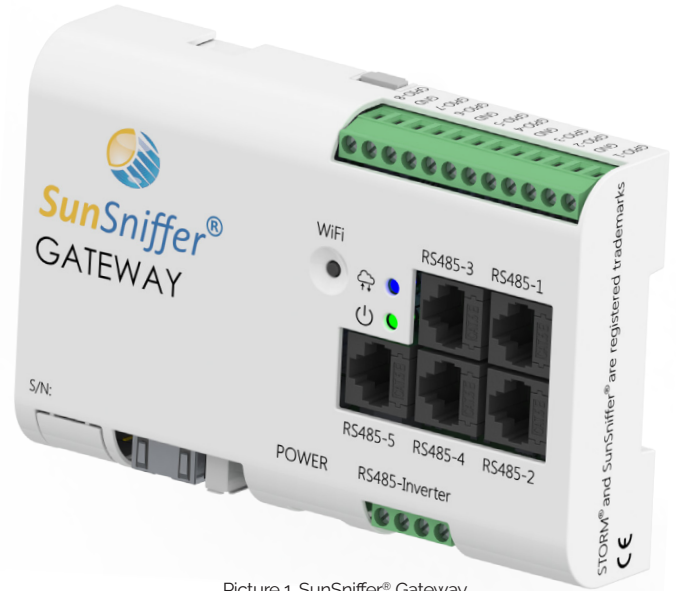
Our Gateway is a **multiple purpose PV data transmission device**. It collects all data from the field, controls inverters, manages environmental sensors, and sends all information to the Webportal, where analysis takes place.

As data collector the Gateway collects the **data from each String Reader** (voltage and current), and the **data from each sensor** (voltage and temperature).

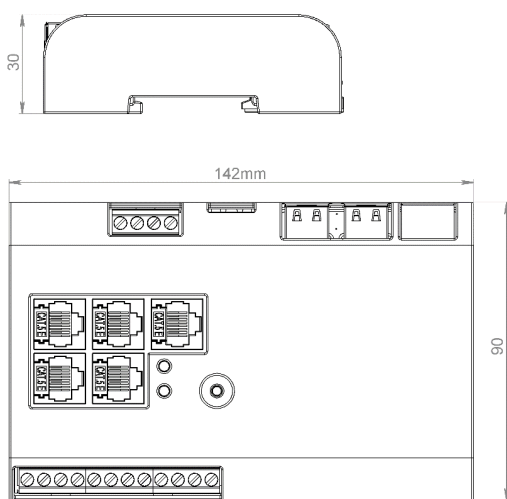
The Gateway can **control and read out data from up to 30 inverters** and has a flexible **power reduction interface**. **Environmental sensors** are supported.

Two "**watchdogs**" prevent potential system crash: the two independent processor boards monitor each other and reboot the system if one should fail.

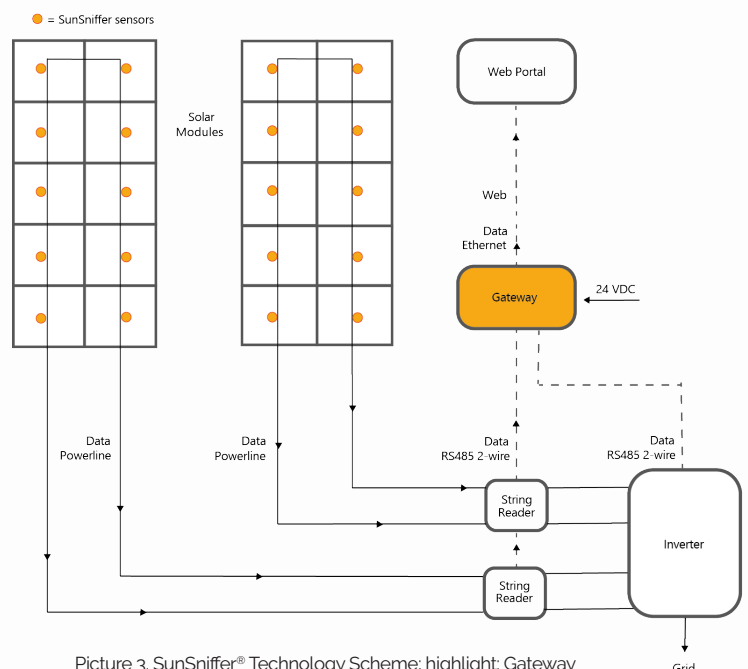
Updates are made automatically via internet.



Picture 1. SunSniffer® Gateway



Picture 2. Gateway dimensions



Picture 3. SunSniffer® Technology Scheme; highlight: Gateway

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## HOUSING:

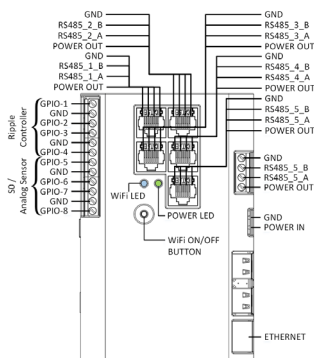
Dimensions (LxWxH)	142x90x30 mm
Weight	0.200 kg
Material	polycarbonate, glass fiber reinforced
Installation	DIN-Rail
Protective insulation	2
Protection class	IP20
Operating temperature	-25 to +60 °C

## INTERNET CONNECTION:

Interface	Ethernet RJ45
IP address	over DHCP, calibrateable

## POWER SUPPLY:

Power supply (included)	+24 V DC 1.5 A (<40 String Readers) 2.5 A (otherwise)
Gateway consumption	<5 W
Consumption per attached String Reader	<1 W



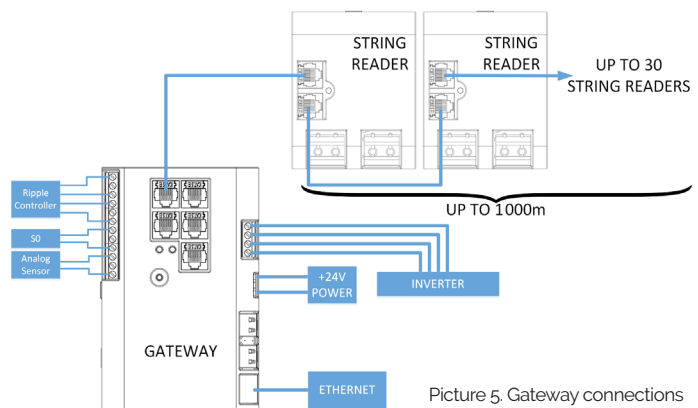
Picture 6. Gateway pinout

## TECHNICAL SPECIFICATIONS:

RS485 communication channels	5
Supported protocols over RS485	MODBUS and others
RS485 baud rate range	1200 up to 115200 Bd
S <sub>0</sub> Inputs (N <sub>so</sub> )	2
Analog Sensors Inputs (N <sub>SENSOR</sub> )	up to 4
Maximum attached String Readers (N <sub>STR</sub> )	30 units/channel; up to 90 pcs.
Maximum inverters (N <sub>INV</sub> )	up to 30 pcs.
Maximum RS485 cable length	1000 (800 recommended) m
<i>Quality-of-Service:</i>	
"Watchdogs" for system crash prevention Device contains two independent processor boards, which monitor each other constantly and are able to reboot the system if the other one crashed. = Quality assurance for hardware = Quality assurance for RS485 data volume transmission	2

## CONNECTIONS:

4 inputs (GPIO-5 - GPIO-8) for S <sub>0</sub> and analog sensors connection (compatible sensors should produce voltage signals varying between 0 and 10V)
4 inputs (GPIO-1 - GPIO-4) for Ripple Controller connection (responsible for power reduction performance)
5 RS485 communication channels for String Reader connection; channel RS485-5 can be accessed either by RJ45 or screw terminal connectors („RS485-Inverter“)
WiFi button for switching-on access point to the internal configuration Web Server
LED lights for internet connection and power indication
Firmware remotely updateable



Picture 5. Gateway connections