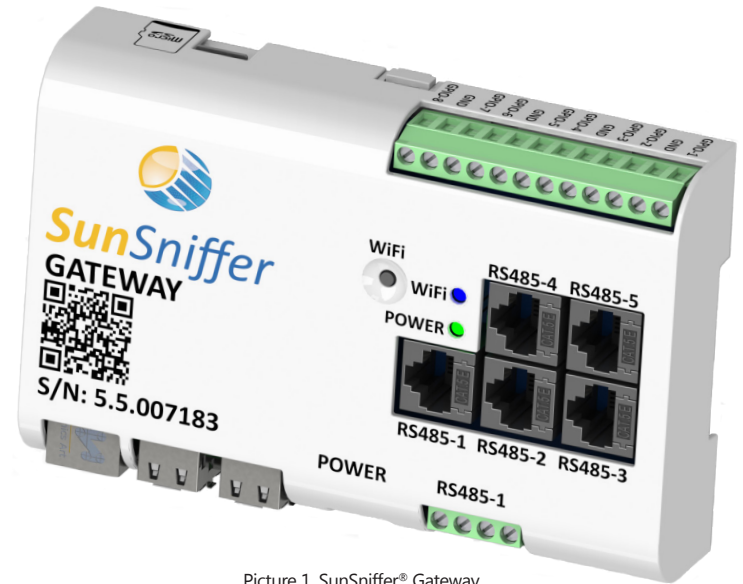




SunSniffer®

SunSniffer® Gateway

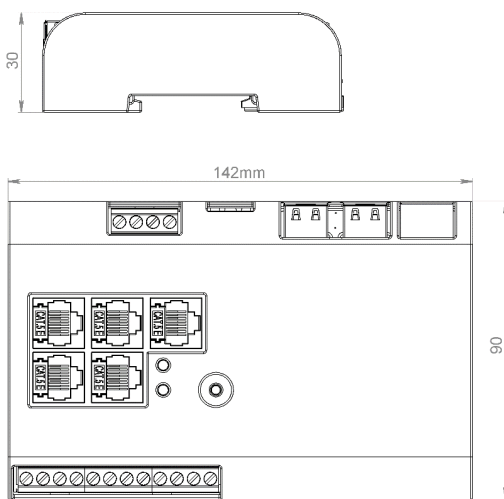
Essential component of the SunSniffer® technology for reliable transmission of data to Web Portal.



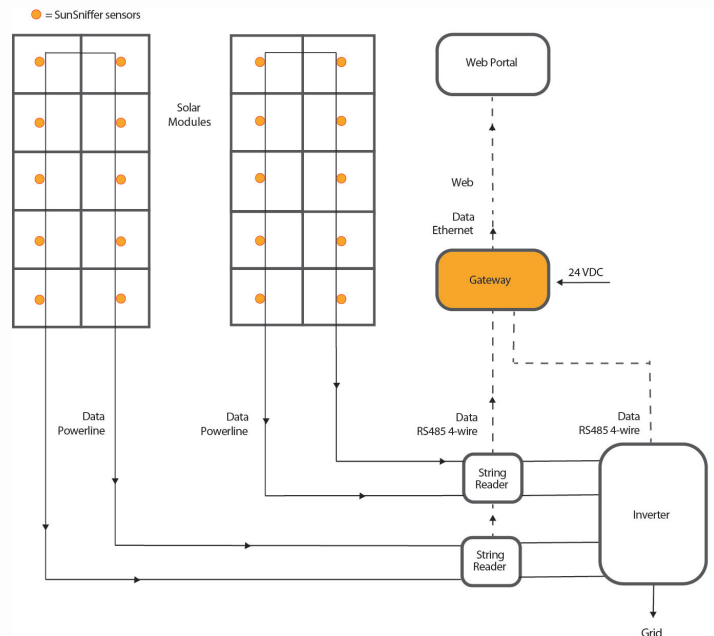
Picture 1. SunSniffer® Gateway

An essential component of the SunSniffer® technology, the Gateway is designed to monitor and control the functionality of solar power plants. It gathers telemetry from various equipment in the field and pushes it to the Web Portal. This data allows offline analysis of plant performance as well as online status control.

The Gateway also provides a flexible interface to configure the power reduction control functionality.



Picture 2. Gateway dimensions



Picture 3. SunSniffer® Technology Scheme; highlight: Gateway

SunSniffer® Gateway

HOUSING:

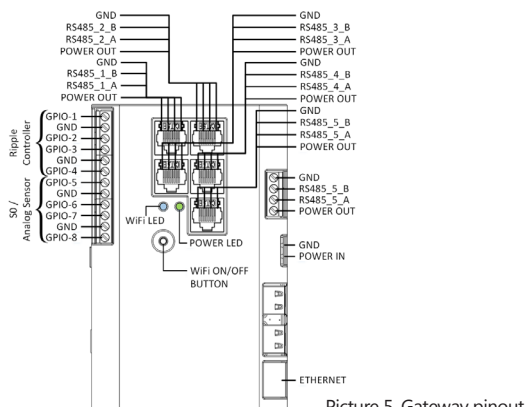
| | |
|-----------------------|--|
| Dimensions (LxWxH) | 142x90x30 mm |
| Weight | 0.200 kg |
| Material | polycarbonate, glass fiber reinforced |
| Installation | DIN-Rail |
| Protective insulation | 2 |
| Protection class | IP51 |
| Operating temperature | -25 to +60 °C |

INTERNET CONNECTION:

| | |
|------------|--------------------------|
| Interface | Ethernet RJ45 |
| IP address | automatically, over DHCP |

POWER SUPPLY & CONSUMPTION:

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



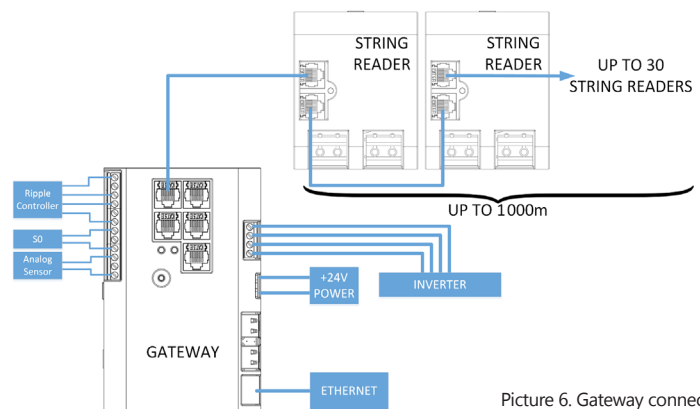
Picture 5. Gateway pinout

TECHNICAL SPECIFICATIONS:

| | |
|---|--|
| RS485 communication channels | 5 |
| Supported protocols over RS485 channel | MODBUS, Danfoss, Kaco, Kostal, ABB (PowerOne), SMA, RefuSol, Solarmax, Schüco, Schüco SGI |
| Communication interfaces | configuration interface accessed by build in WiFi or ethernet cable, remote control from WebPortal |
| S ₀ Inputs (N _{S0}) | 2 |
| Analog Sensors Inputs (N _{SENSOR}) | up to 4 |
| Maximum attached String Readers (N _{STR}) | 30 units/channel; up to 150 pcs. |
| Maximum inverters (N _{INV}) | up to 30 pcs. |
| Maximum RS485 cable length | 1000 (800 recommended) m |

CONNECTIONS:

- 4 inputs (GPIO-5 - GPIO-8) for S₀ and analog sensors connection
- 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 for String Reader or inverter - use either screw terminal or RJ45
- 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 6. Gateway connections