

WIRELESS-SET485

- > Overcoming construction obstacles
- > RS485 radio bridge to complement cable communication
- > Long range
- > Easy commissioning thanks to a pre-configured system
- > Flexible: external mounting of the antenna is possible



WIRELESS-SET485

RS485 cabling – simply without obstacles

Now distance can be bridged easily: SMA's Wireless-Set485 allows wireless contact between two sections of a PV plant with RS485 communication. It can be used where laying cable would be impossible. In this way, the Wireless-Set's radio modules connect two buildings, for example. Overcoming construction obstacles like streets, railway segments or rivers can be now realized without underground cabling. The Wireless-Set covers a distance of up to 500 meters in an open field and can be flexibly applied in almost any case.



WIRELESS-SET485

Wireless-based data transfer over long distances

Do you run into limitations when using RS485 wiring? Is a land cabling too difficult or impossible because of obstacles? No problem, SMA offers you the appropriate solution with the Wireless-Set485. The Wireless-Set allows you to replace a RS485 cable section with a radio segment, and connects, for example, a distant portion of the installation with an SMA communication device like, e.g., a Sunny WebBox or Sunny Boy Control*.

The particularity of the innovative set: it transfers the data via radio technology with a point-to-point connection and needs no additional cabling between these two points. For your clients, this

is a decisive advantage because the Wireless-Set bridges obstacles like a street or a paved court with no difficulty, saving the expensive laying of cables. The set's radio module has a long range and can transport data up to 500 meters away.

The separate antenna is ideally suited for outdoor installation; therefore, you can achieve an optimal range in a few steps and you avoid radio wave absorbing materials such as thick concrete walls.

Simple: quickly installed and preconfigured

From the radio module to the wall pow-

er supply – the Wireless-Set485 has everything needed for commissioning. The additional quick installation poster, which is included, will help you with the simple and easy installation close to your SMA devices. The Wireless-Set is already completely preconfigured by SMA, therefore no further software settings are needed. This means: saving time and costs.

Flexible: data transfer at any place of use.

Further advantage for your clients: no socket is needed for the power plug in the vicinity of the radio. The voltage is provided by using a power injector

* The combination Sunny Boy Control with inverters of the new generation is not possible..



Long range due to external antenna



Highly secure data transfer



Wireless communication

Overcoming of obstacles



Easy installation



pre-configured



via the data cable. The power injector can be up to 30 meters away from the radio module. In this way you can place the module in a way such that it achieves a maximal range. This allows for contact between two installation sections even in hard-to-reach areas.

The SMA Wireless-Set overcomes barriers: it bridges broad distances effortlessly and establishes a secure connection between two PV plant sections. With the Wireless-Set your client saves the costs of expensive cabling and he can transmit his plant data simply via radio to the main building. If you wish to find out more about plant monitoring with SMA communication

devices, you are invited to attend a seminar at the SMA Solar Academy. Go to www.SMA.de/solar-academy and choose from a great variety of seminars. Our staff at the Solar Academy will be happy to advise you.

Two sets – for any requirement

The Wireless-Set485-01 includes the basic equipment for the connection of two elements in a solar plant. If your client wishes to connect an additional inverter group, recommend to him the Wireless-Set485-02 for complementing the wireless-based version, with all necessary accessories.

The Wireless-Set485-02 uses the already existing power injector of the first set and it is specially configured so that parallel operation with the first set is easily possible.

Technical Data

WIRELESS-SET485

	Wireless-Set485-01	Wireless-Set485-02
Communication		
Inverter communication RS485	●	●
Maximal communication range in the open, RS485 / radio in m	1200 / 500	1200 / 500
Frequency band	433.05 MHz - 434.75 MHz	433.05 MHz - 434.75 MHz
Channel spacing	25 kHz	25 kHz
Topology	Point-to-point connection	Point-to-point connection
Interfaces		
RS485	2 x (In / Out)	2 x (In / Out)
Power supply		
Voltage supply socket transformer	●	●
Plug-in power supply	90 V _{AC} - 264 V _{AC} , 50 / 60 Hz	90 V _{AC} - 264 V _{AC} , 50 / 60 Hz
Output voltage	12 V _{DC} / 0.85 A	12 V _{DC} / 0.85 A
Power consumption typical	10 W	10 W
Max. distance between Power Injector and radio module	30 m	30 m
Dimensions (W / H / D) in mm	105 / 55 / 30	105 / 55 / 30
Weight (without cables)	80 g	80 g
Mounting site	indoors	indoors
Ambient Conditions		
Ambient temperature	-10 °C ... +55 °C	-10 °C ... +55 °C
Relative humidity	5 % ... 95 %, non-condensing	5 % ... 95 %, non-condensing
Enclosure rating	IP 20	IP 20
General data of the radio module		
Dimensions (W / H / D) in mm without the antenna	70 / 95 / 30	70 / 95 / 30
Weight	150 g	150 g
Mounting site	indoors	indoors
Installation: Wall mounting	●	●
LED Status display	2	2
Features		
Radio module, outdoor antenna, mounting plate, 3 m antenna cable	2	2
RS485 Power Injector	2	1
Plug-in power supply	2	1
Interfaces: RS485 / radio	● / ●	● / ●
Warranty: 2 years	●	●
Certificates and Approvals	www.SMA.de	www.SMA.de
● Standard ○ Optional		

