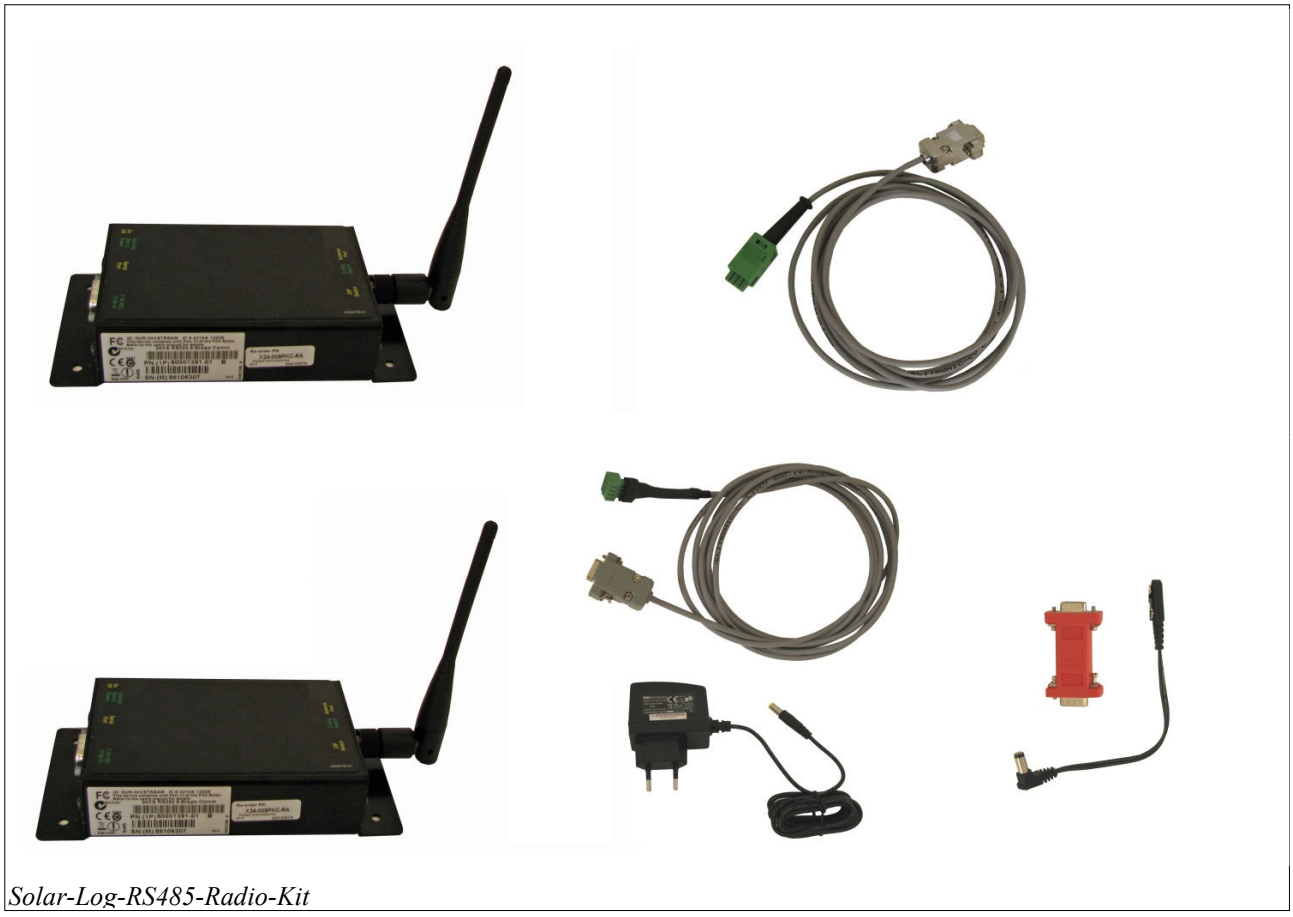
Solar-Log RS485 Radio-Kit Installation Instructions

With the help of this radio kit, a wireless data connection can be established between inverters and the Solar-Log™.

Note: Please make note that the radio units must be configured for the inverter manufacturer in advance. If more than one radio package is used for the same installation, this also must be expressly stated when ordering the radio package! For subsequent configuring and addressing of the radio package there will be charged a fee.

Scope of delivery

The package consists of 2 radio units, 2 cable sets, 1 power supply (if the two radio units are used between 2 inverters a 2nd power supply must be ordered), along with 1 diagnostic plug and an adapter for a 9 Volt block.



Solar-Log-RS485-Radio-Kit

Installation

The radio units are identical. It does not matter, therefore, which unit is used on the Solar-Log™ side or on the inverter side.

Both connecting cables are already completely prepared and ready for connection. ***Never cut the cables! This is not necessary as the kits are complete with screw connections***.

Check both radio units to see that the settings of the DIP switches are as follows by default:

1	2	3	4
			■
■	■	■	

Positions 5 and 6 are for programming purposes only and must not be changed! Both units, however, must have the same switch positions.

Solar-Log side:
Connect one of the radio units with the “Radio unit to Solar-Log“ cable to the RS485 port of the Solar-Log. The operating voltage comes from the Solar-Log.

Inverter side
Connect the second radio unit with the “Radio unit to inverter“ cable. The end of the cable has an appropriate plug connection with which to wire the inverter connection. There is no need to cut the cables! This cable has a socket with screws that can be adapted to any inverter wiring. Now you can plug the power supply into the radio unit.

The installation is thereby completed. Now you can continue with the inverter detection from the Solar-Log. Follow the instructions in the Solar-Log manual.

Diagnostic function

Note: *The diagnostic function is only possible with the Solar-Log 1000 (with touchscreen).*
In order to test the signal range and to determine the optimal mounting position of the units/antennas, there is a special diagnostic configuration menu. One of the units is to be connected using the Radio unit to Solar-Log cable to the desired RS485 port of the Solar-Log 1000. It is thereby automatically operational. The second unit must be configured for the diagnosis:

1. Plug in the red diagnosis plug
2. Set the DIP switch to diagnosis (1=ON, all other OFF)*

1	2	3	4
■			
	■	■	■

3. Connect the 9 Volt battery (6LR61) to the included voltage adapter and plug it into the radio unit.

Radio unit with diagnostic plug and "mobile" 9V power supply

Now the second radio unit is operational and sends all received data back immediately.
The test can now be carried out on the Solar-Log 1000 using the display in the menu item “Config/Extended/ RS485-Radio-Set“. The test column must stabilize at 100% to have a successful radio connection! Now the radio connection is optimal and the radio unit can be positioned accordingly.
After the diagnosis, the DIP switch must be put back in the original condition and the red diagnostic plug removed. The power is supplied later by means of the included power supply unit.

*Generally, when changing DIP switch positions, turn the units off and on to validate the changes.