RS485 System Functionality und System Details

RS485 Communication

The RS485 communications technology, as a widely used industry standard, provides an efficient monitoring of PV systems over long distances and in areas with strong electrical interference.

The Micro-inverters are equipped with two RJ-45 connectors and can be used in conjunction with a data logger to monitor the performance of the PV system.









How does it work?

Each micro-inverter is connected to a PV-module using the DC wiring. The DC power is individually converted into grid-compliant AC power. For the RS-485 version, the converted AC power is then directly fed into the utility grid via AC wiring.

The inverter is equipped with two AC terminals on the right side of the connection area. The inverter has two 3-pin AC connectors. The AC connectors are polarized differently, so that multiple inverters can be connected to form a continuous AC power circuit.

To enable communication and monitoring, the micro-inverters are additionally equipped with two RJ-45 connectors, with which the micro-inverters can be connected to each other and then either to a RS485-USB Interface converter or to the data logger as well as to a building management system.

