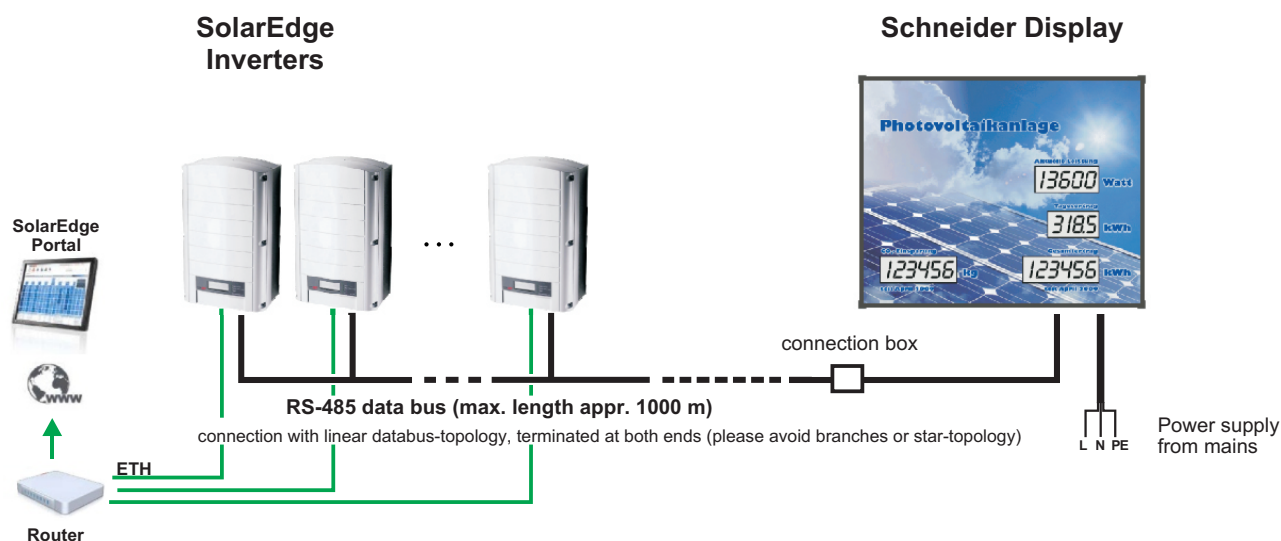# Connection diagram: Display for SolarEdge-Inverters via RS-485 (direct)

The display unit is equipped with two cables, each about 3 m long, which provide the connection to mains and to the data source. The display has to be connected directly to the RS-485-Inverter-Bus, recommended cable e.g.shielded cable: JY-(St)-Y 4 x 0.6 mm².

mains cable	H03VV-F3 x 0.75 mm²	brown L blue N yellow/green PE	Mains 230V, 50 Hz LCD: typ. 1,5 Watt LED: typ. 11 Watt
data cable	3 x 0.25 mm²	brown A blue B grey Gnd	Interface RS-485 to SolarEdge Inverters

Concept of Data Collection:

The SolarEdge inverters can be adressed directly by the display on their Modbus-RTU-interface.

All data which is transmitted via interface (e.g. "actual power" or "total energy") can be visualized 1:1 on the display unit. Additional data can be calculated in the display, such as the "CO_2 -equivalent value" or the "daily energy".

Hotplugging: After all inverters have started up and are ready connected to the display with the appropriate device-IDs, please restart the display unit once by Power-On-Reset in order that the display collects all inverters correctly.

Safety Information:

Installation of the display unit by skilled staff only. Relevant rules for electrical safety have to be followed.

Disconnect from mains before opening.

DataConnection / Configuration

The display uses the Modbus RTU interface of the inverters as a master on the RS-485 data bus.
Each inverter has to get its own device-ID (bus address). The display requests the address-range 1 to 10.

Please terminate the RS-485 data bus at both ends. Set termination at the last inverter in the chain: Dip-switch (sw7) on communication circuit board of inverter - as described in SolarEdge installation manual.

The parameters of the RS-485 interface must be adjusted at the inverter suitable for data query of the display.

Menu item: **<Communication> / <RS-485 - 1 Conf>**

Please adjust the following parameters:

<Device type>: Non - SolarEdge Datalogger

<Protocol> :   SunSpec

<Device-Id> :   1 .. 10

<Baud rate> :   9600 Baud