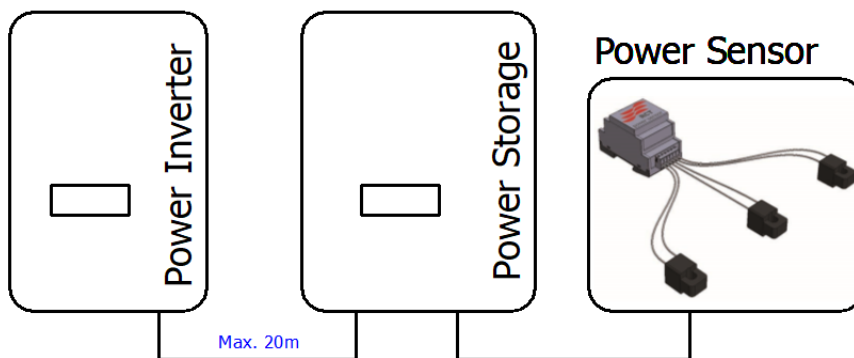


Networking of multiple inverters via S0-Interface

1.1 Networking of 1 Power Storage and 1 Power Inverter

You can use the inverter's integrated the S0 interface to monitor a solar installation with RCT inverters collectively. Excess power generated by the power inverters can be stored in the battery via the Power Storage.

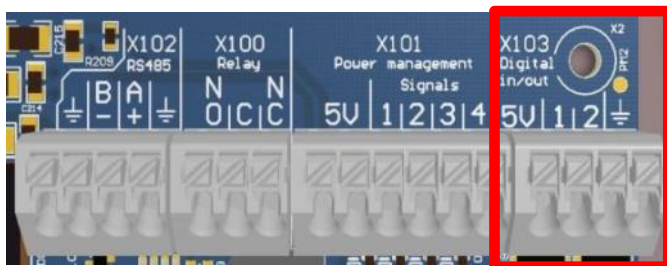
The RCT Power APP displays the generated power of the other inverters as a system total value when the Power Storage is accessed via the RCT Power APP.



The total cable length must not exceed 20 m.

Commissioning / Wiring:

Use a twisted pair cable to link the inverters together.



The total cable length must not exceed 20 m.

Configuration RCT Power App Digital I/O 's
Digital I/O 1 usage: Input S0 grid power feed-in (10000 imp)
Digital I/O 2 usage: Output S0 inverter power (2000 imp)

Power Inverter



X103

5V 1 2 GND

Configuration RCT Power App Digital I/O 's
Digital I/O 1 usage: Input S0 external power (2000 imp)
Digital I/O 2 usage: Output S0 grid power feed-in (10000 imp)

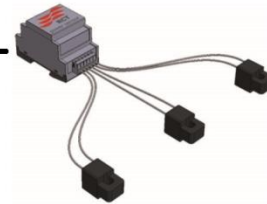
Power Storage DC



X103

5V 1 2 GND

Power Sensor



Max. 20m

Wiring example with Power Storage DC.

Configuration RCT Power App Digital I/O 's
Digital I/O 1 usage: Input S0 grid power feed-in (10000 imp)
Digital I/O 2 usage: Output S0 inverter power (2000 imp)

Power Inverter



X103

5V 1 2 GND

Configuration RCT Power App Digital I/O 's
Digital I/O 1 usage: Input S0 external power (2000 imp)
Digital I/O 2 usage: Output S0 grid power feed-in (10000 imp)

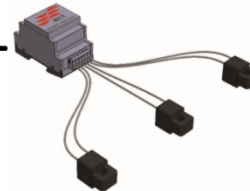
Power Storage AC



X103

5V 1 2 GND

Power Sensor



Max. 20m

Wiring example with Power Storage AC.

Configuration using the APP:

Power Inverter configuration:

Launch the "RCT Power APP" and continue to

DEVICE → Settings → Interfaces → Digital I/O's → Digital I/O 1 usage → Input S0 grid power feed-in
Select "10000" for "Number of impulses per kWh for S0 signal on I/O 1", and continue with

DEVICE → Settings → Interfaces → Digital I/O's → Digital I/O 2 usage → Output S0 inverter power
Select "2000" for "Number of impulses per kWh for S0 signal on I/O 2"

Press the "FLASH" button to confirm the changes to your settings!

Power Storage configuration:

Launch the "RCT Power APP" and continue to

DEVICE → Settings → Interfaces → Digital I/O's → Digital I/O 1 usage → Input S0 external power
Select "2000" for "Number of impulses per kWh for S0 signal on I/O 1", and continue with

DEVICE → Settings → Interfaces → Digital I/O's → Digital I/O 2 usage → Output S0 grid power feed-in
Select "10000" for "Number of impulses per kWh for S0 signal on I/O 2"

Press the "FLASH" button to confirm the changes to your settings!

Solar plant peak power adjustment:

If a Power Storage is the main device of a solar system but the system also includes other inverters it is required to adjust the peak power in all devices to the system solar plant peak power. The solar plant peak power is the sum of the peak powers of the individual inverters in the system, all of which are measured by the power sensor.

The value for "External power reduction based on solar plant peak power" must be set for each device. (70% rule)

The solar plant peak power can be adjusted under:

DEVICE → Settings → Device settings → Solar plant peak power

Confirm the updated value by pressing "Done" on the keypad and then update settings by pressing "FLASH".

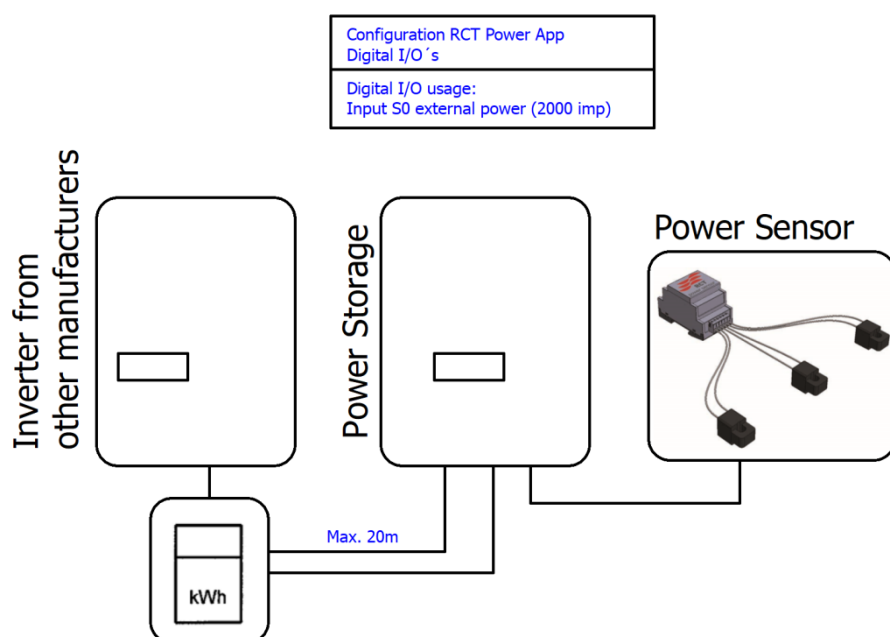
1.2 Networking of 1 Power Storage and 3rd party inverter

You can use the inverter's integrated the S0 interface to monitor a solar installation with third-party inverters collectively.

In the case of a third-party product, an electricity meter with S0 must be installed at the inverter output. The meter is then connected to the S0 interface of the Power Storage.

Excess power generated by the third-party inverters can be stored in the battery via the Power Storage.

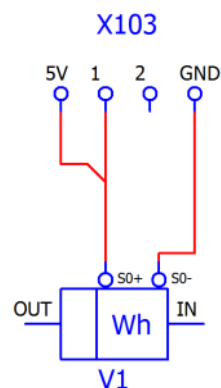
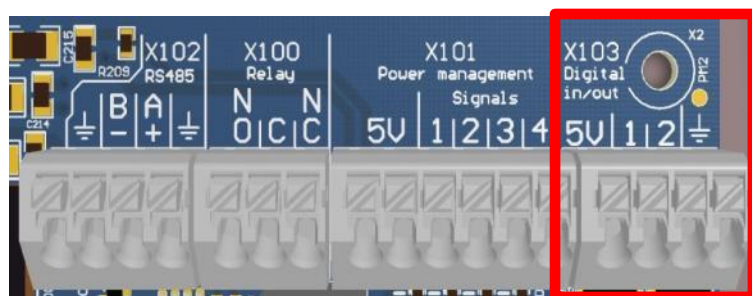
The RCT Power APP displays the generated power of the third-party inverters as a system total value when the Power Storage is accessed via the RCT Power APP.

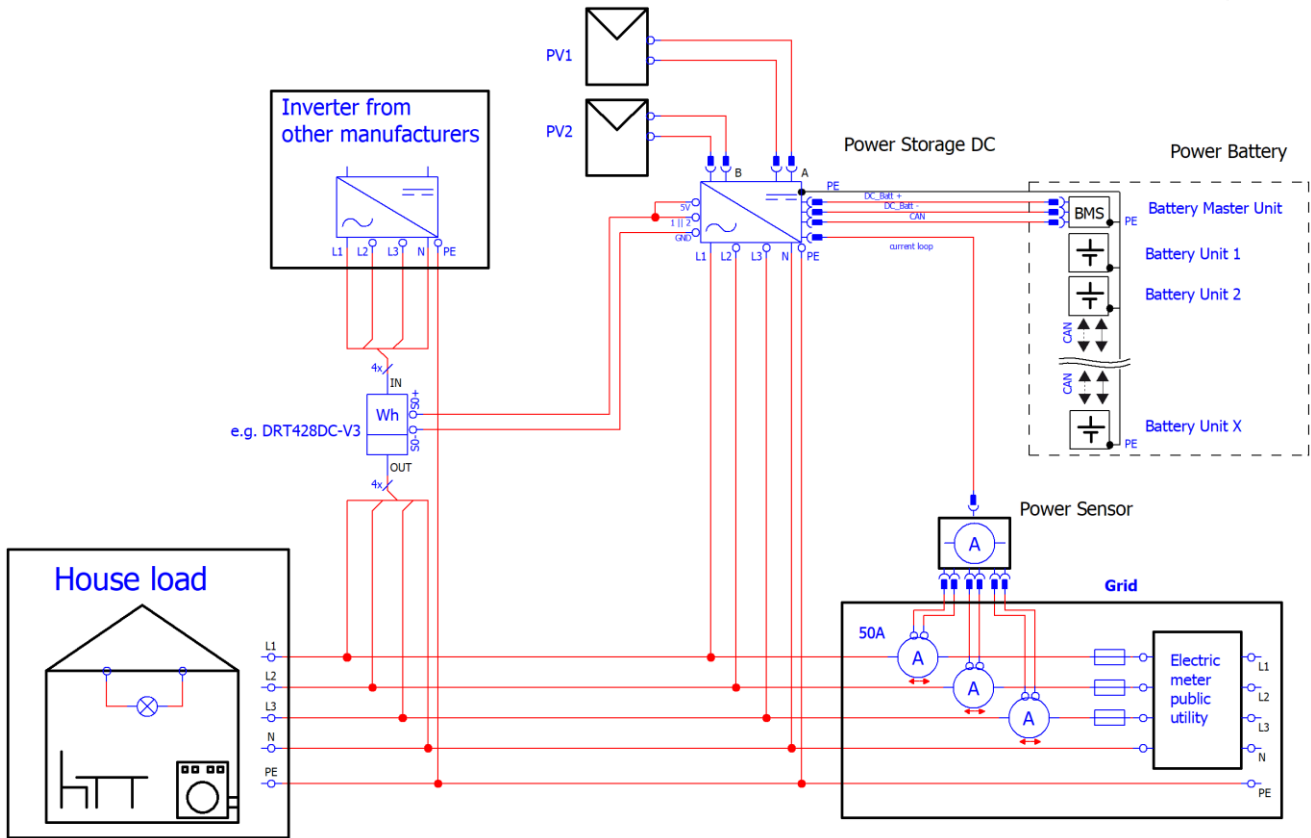


The total cable length must not exceed 20 m.

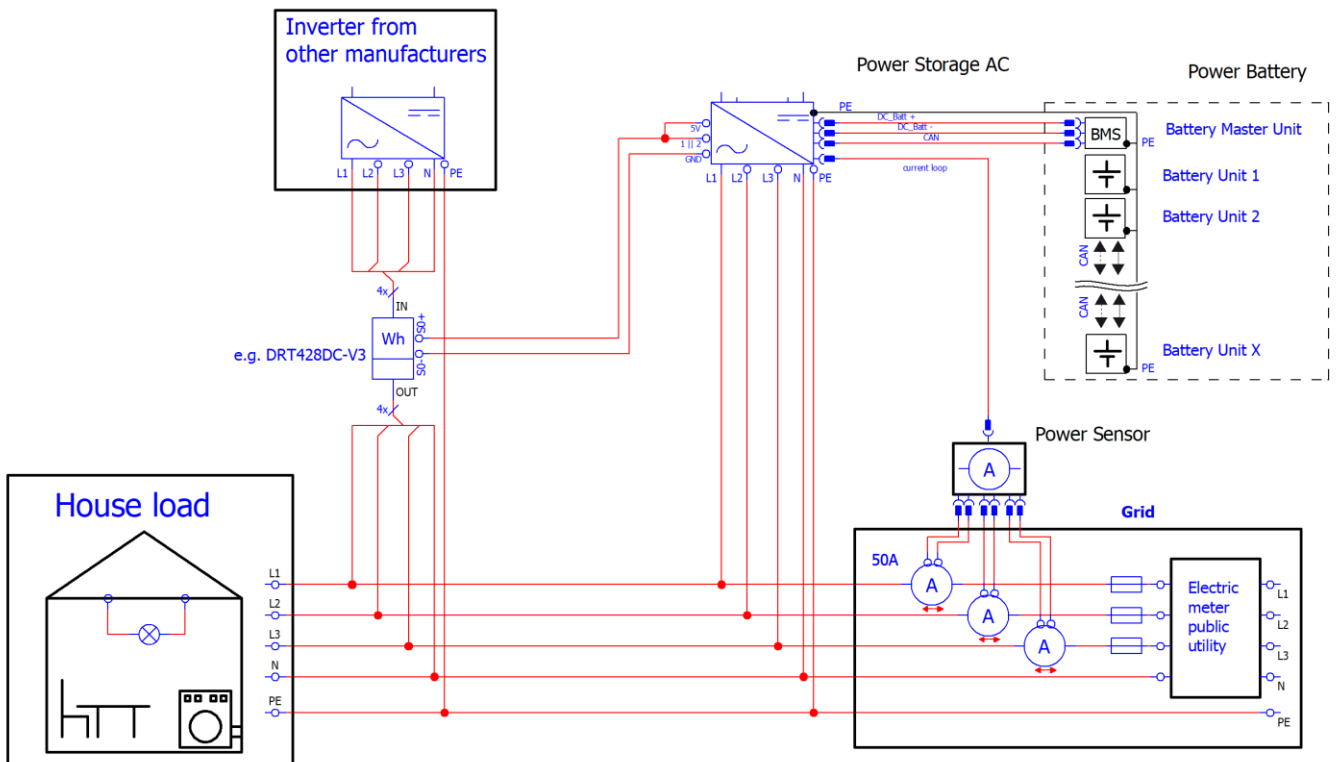
Commissioning / Wiring:

Use a twisted pair cable to link the thrd-parter inverter.





Installation instructions using Power Storage DC



Installation instructions using Power Storage AC

Configuration using the APP:

Power Storage

Launch the "RCT Power APP" and continue to

DEVICE → Settings → Interfaces → Digital I/O's → Digital I/O 1 usage → Input S0 external power

Select "2000" for "Number of impulses per kWh for S0 signal on I/O 1"

Press "Done" on keypad to enter the value. Now press the "FLASH" button to confirm the changes to your settings!

You can also alternatively use Digital I/O 2 for this setting.

Solar plant peak power adjustment:

If a Power Storage DC is the main device of a solar system but the system also includes third-party inverters it is required to adjust the peak power in all devices to the system solar plant peak power.

The solar plant peak power is the sum of the peak powers of the individual inverters in the system, all of which are measured by the power sensor.

The solar plant peak power can be adjusted under:

DEVICE Settings Device settings Solar plant peak power

Confirm the updated value by pressing "Done" on the keypad and then update settings by pressing "FLASH".

The value for "External power reduction based on solar plant peak power" must be activated and set for the third-party inverter.