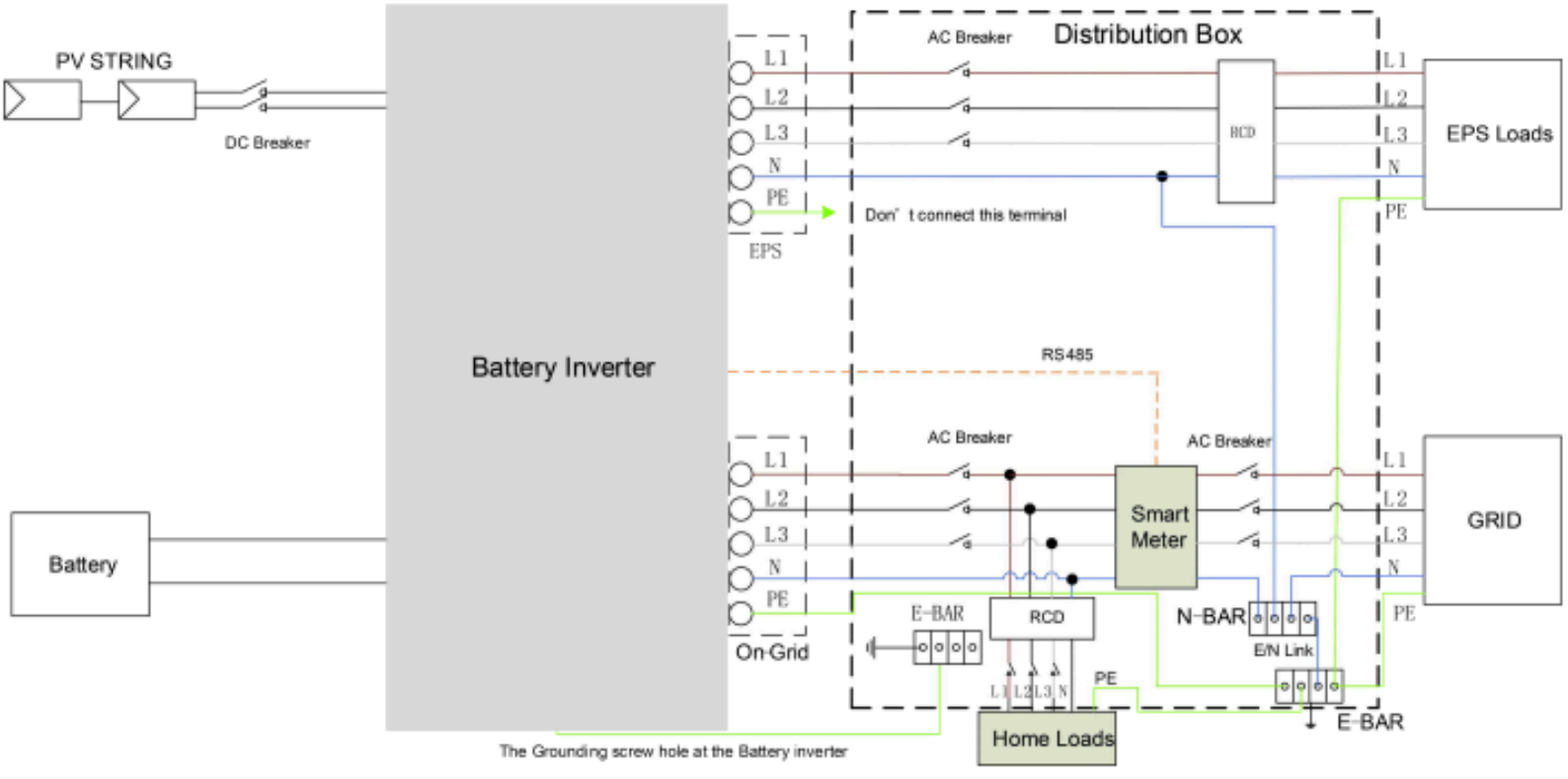
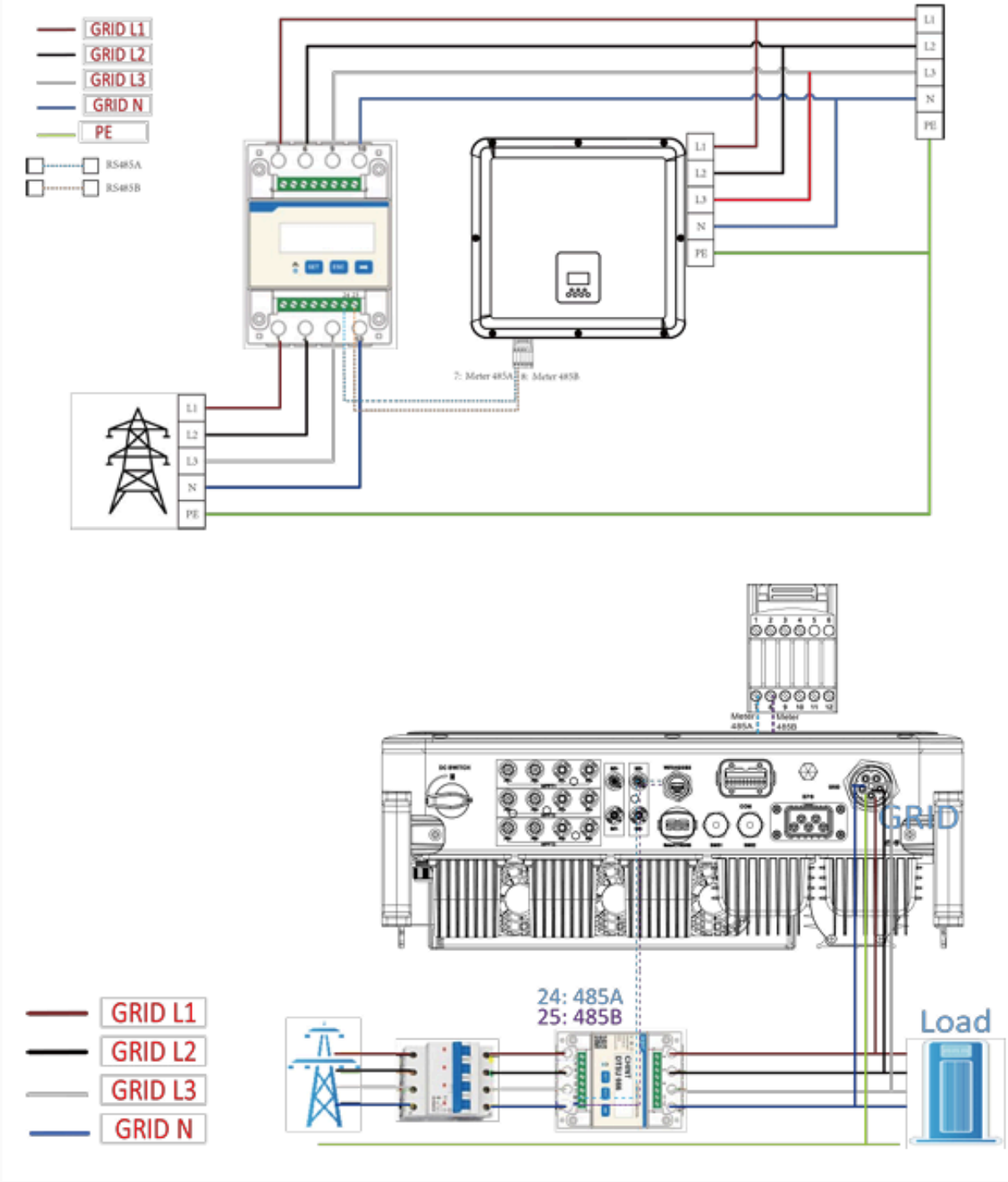
Fox 30kW South Africa Wiring Regulations

For countries such as **Australia, New Zealand, South Africa, etc,** please follow local wiring regulations.
According to Australian safety requirements, **the N cables of the GIRD side and EPS side must be connected together.**
Otherwise, the EPS function will not work.

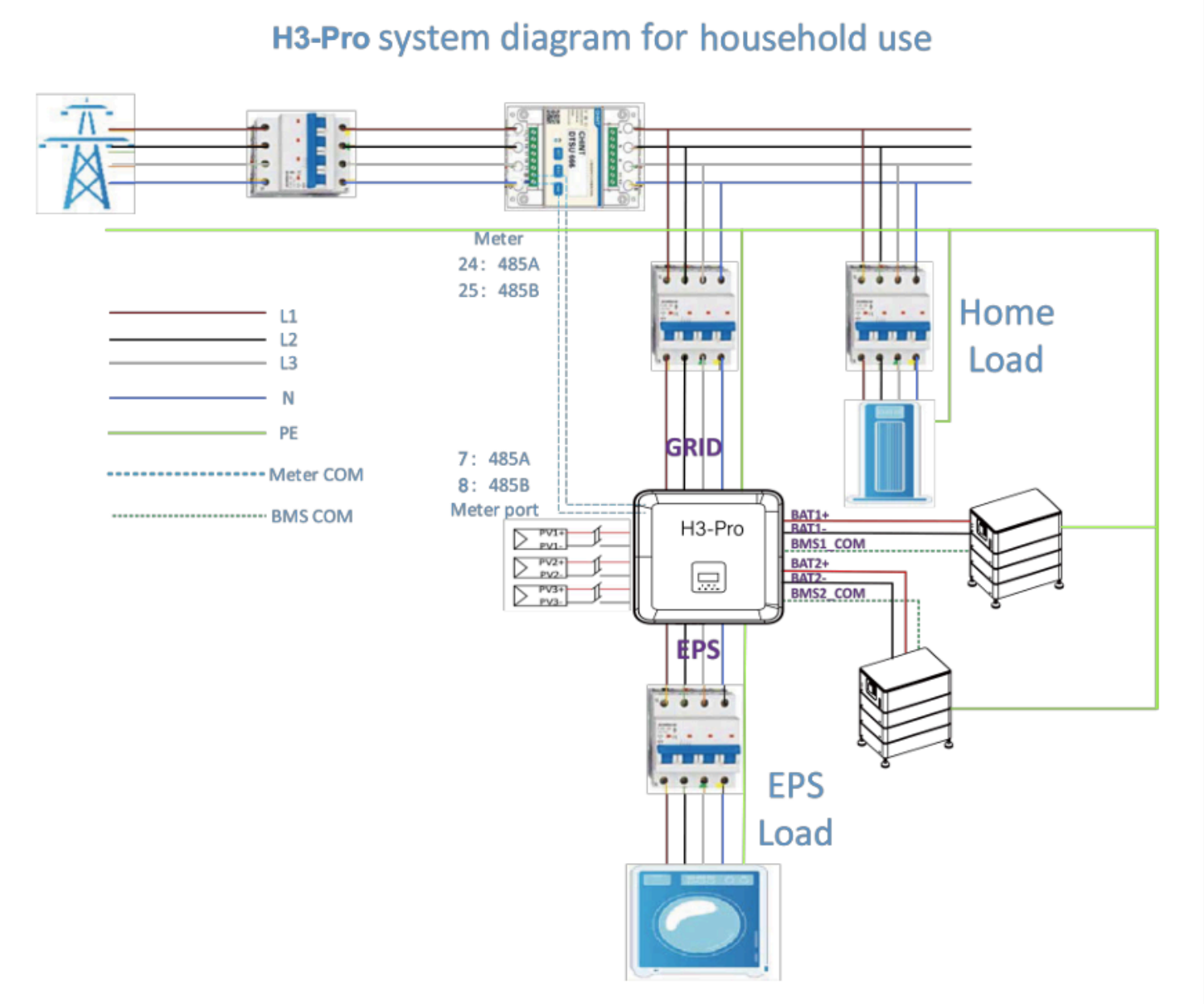


Fox 30kW Hardwired Chint Meter Wiring and Communication wiring

The electricity meter is connected as follows:



Please note: These Meters are wired with the ***Input*** at the ***Bottom*** and the ***Output*** on the ***Top***



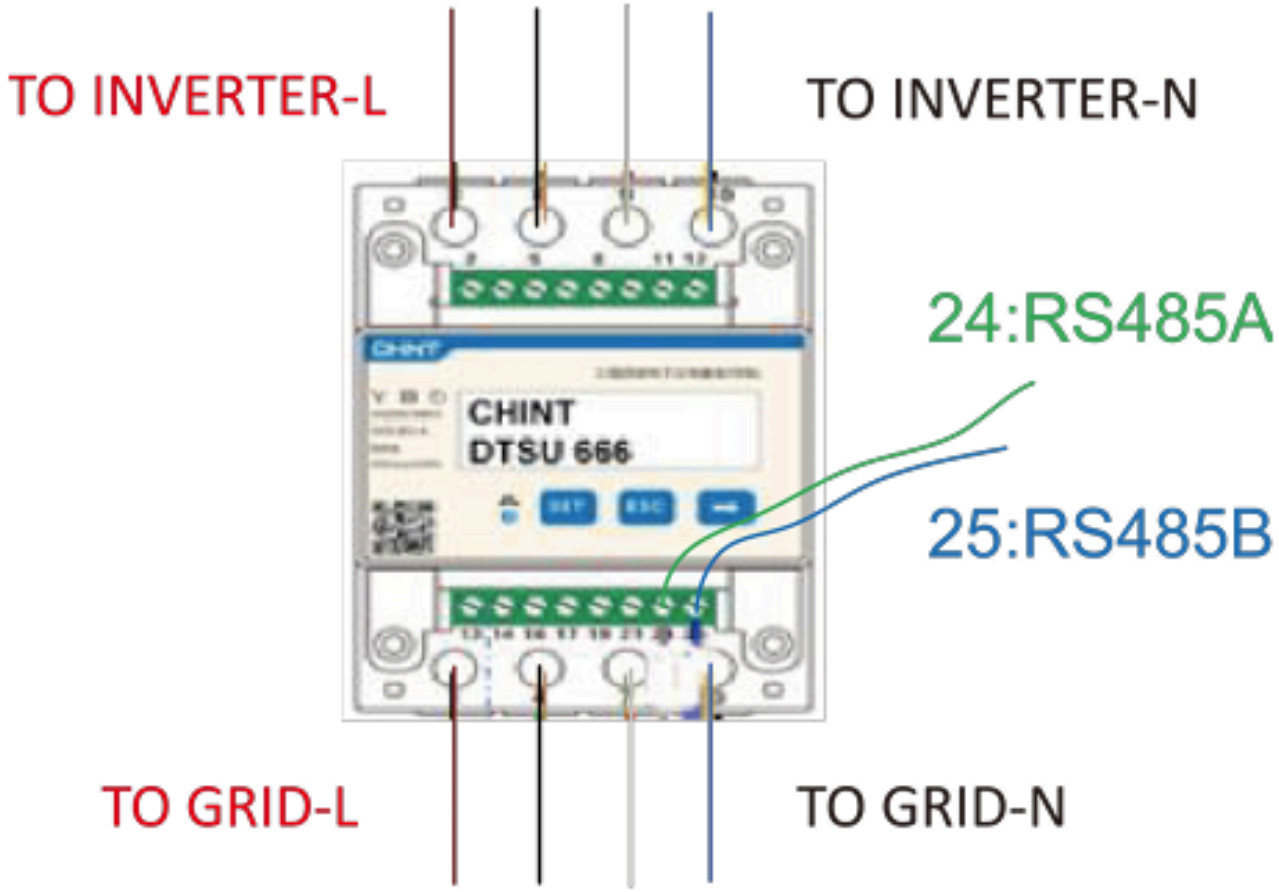
Please note:

"***Pin 24***" on the Meter will connect to "***Pin 7***" ***METER 485A*** on the Inverter Plug

"***Pin 25***" on the Meter will connect to "***Pin 8***" ***METER 485B*** on the Inverter Plug

Meter connection：

Meter Connection Diagram



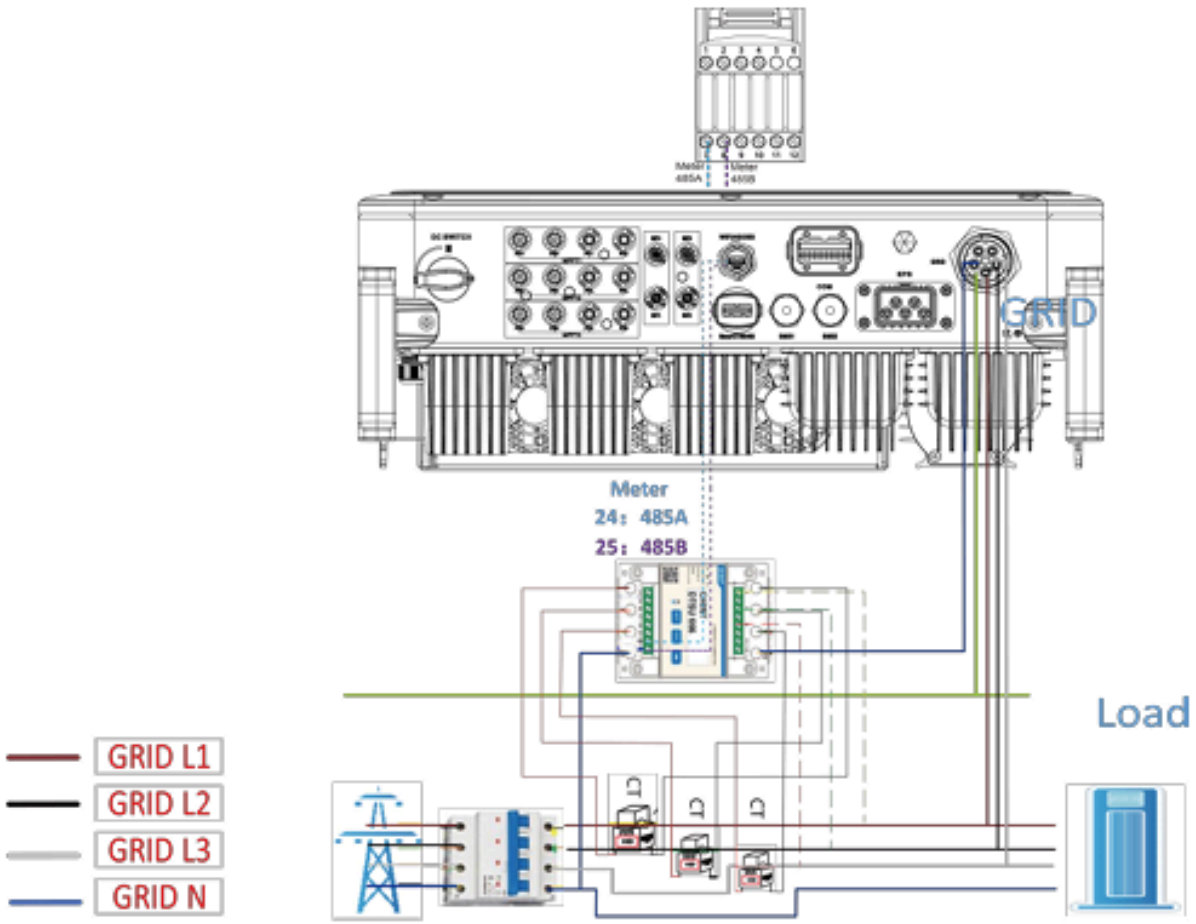
Insert L1/L2/L3/N wires and RS485A/B cable into the meter.Please refer to the meter wiring diagram on side of meter itself.

Connect RS485A to the 24 pins of the meter port and RS485B to the 25 pins of the meter port. Please use twisted pair cable.

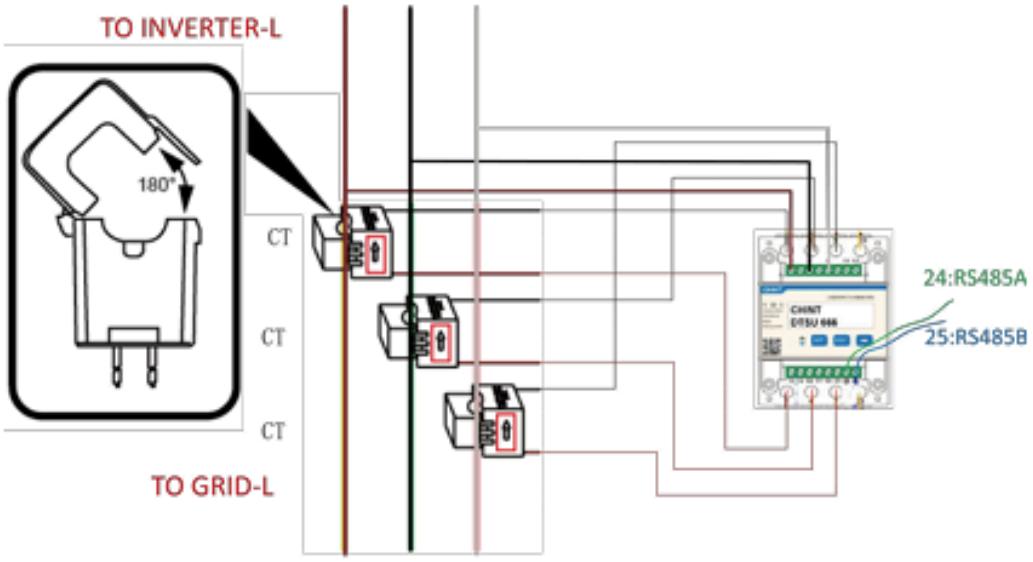
The definition of the meter port refers to the METER/CT/RS485 interface(20pin terminals)in page 32.

The built-in meter is a regular meter, and if a CT meter is required, additional purchase is required.
CT Meter Connection Diagram:

Fox 30kW CT Based Chint Meter Wiring and Communication wiring

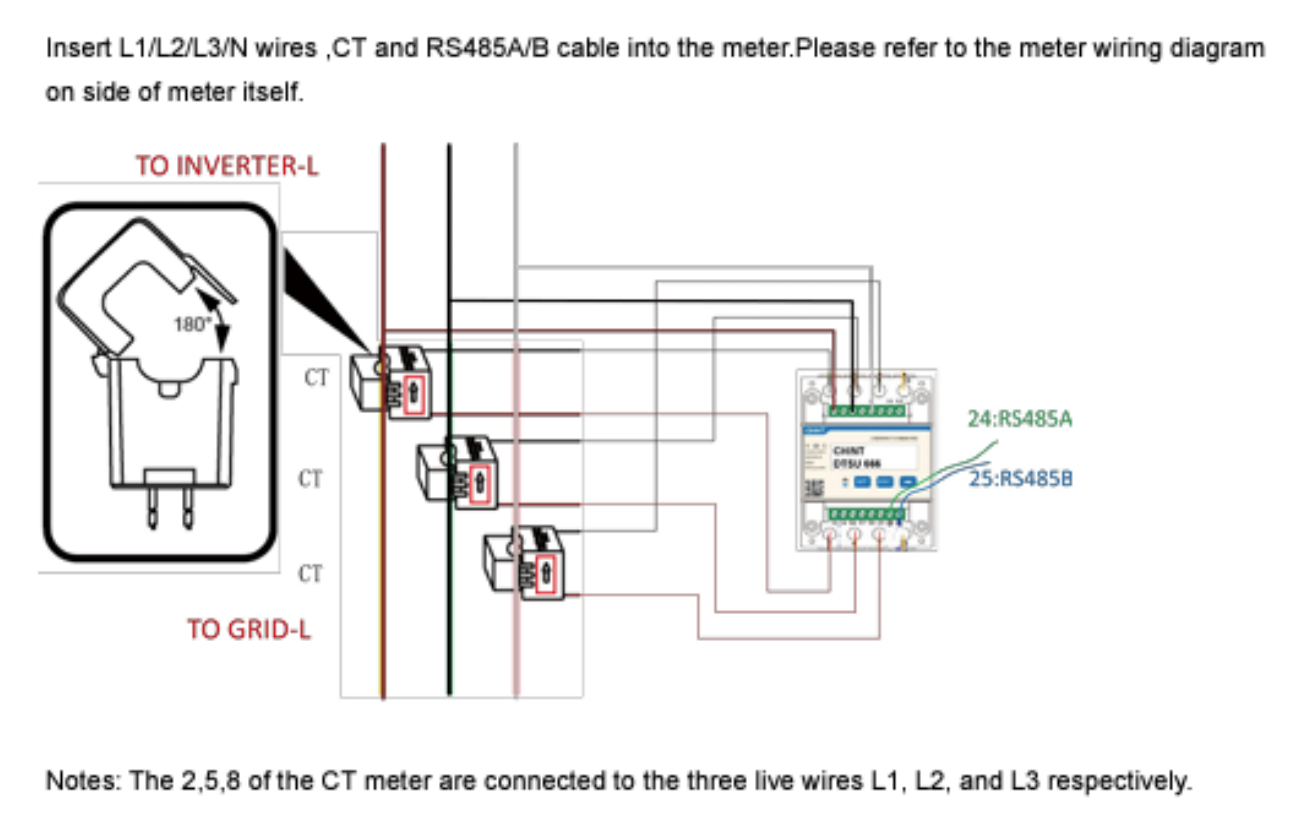


Insert L1/L2/L3/N wires ,CT and RS485A/B cable into the meter.Please refer to the meter wiring diagram on side of meter itself.



Notes: The 2,5,8 of the CT meter are connected to the three live wires L1, L2, and L3 respectively.

Please note: The Arrow on each CT needs to face towards the Inverter on the Main incoming supply



Please note:

"***Pin 24***" on the Meter will connect to "***Pin 7***" ***METER 485A*** on the Inverter Plug

"***Pin 25***" on the Meter will connect to "***Pin 8***" ***METER 485B*** on the Inverter Plug

Fox 30kW PV Connections

6.2 PV Connection (For H3-Pro Only)

Step 1: PV String Connection

H3-Pro series 10-12kw inverters can be connected with 1 -string of PV modules. Please select suitabe PV modules with high reliability and quality. Open circuit voltage of module array connected should be less than 1000V, and operating voltage should be within the MPPT voltage range.

For H3-Pro-15.0, H3-Pro-20.0, H3-Pro-24.9, H3-Pro-25.0, H3-Pro-29.9, H3-Pro-30.0 each MPPT can be connected to 2 strings of PV modules. PV input PV1 and PV2 connect to MPPT1 , PV3 and PV4 connect to MPPT2 , PV5 and PV6 connect to MPPT3, For the best use of PV power , Two strings connected to the same MPPT should be the same in PV string structure, including the type, number, tilt, and orientation of the PV modules.

NOTE

Note!

Please choose a suitable external DC switch if the inverter does not have a built-in DC switch.

⚠ WARNING

Warning!

PV module voltage is very high and within a dangerous voltage range, please comply with the electric safety rules when connecting.

The voltage difference between two strings connected to the same MPPT is too large, which may cause current to flow into the photovoltaic panel and damage it , this connection method, Fox ESS does not a ssume any responsibility.

⚠ WARNING

Warning!

Please do not make PV positive or negative to ground!

NOTE

Note!

PV modules: Please ensure they are the same type, have the same output and specifications, are aligned identically, and are tilted to the same angle. In order to save cable and reduce DC loss, we recommend installing the inverter as near to the PV modules as possible.

PV modules:

Please ensure they are the same type, have the same ***output*** and ***specifications***, and are ***aligned identically***, and are ***tilted*** to the same ***angle***.

In order to save cable and reduce DC loss,
we recommend installing the inverter
as near to the PV modules as possible.

MPPTs:

Each MPPT can have 2 strings of PV modules.

PV input ***PV1*** and ***PV2*** are connected to ***MPPT 1***,

PV input ***PV3*** and ***PV4*** are connected to ***MPPT 2***,

PV input ***PV5*** and ***PV6*** are connected to ***MPPT 3***,

For the best use of PV power,
Two strings connected to the same MPPT should have the same ***PV string structure***, including the ***type***, ***number***, ***tilt***, and ***orientation*** of the PV modules.