



SOLAX
POWER

DATA**HUB**1000

- X Overview funzionalità**
- X Quando usare il DATAHUB**
- X Hardware overview**
- X Esempio di applicazione**
- X Configurazione impianto misto**



DATAHUB 1000 è il prodotto SolaX che permette di interfacciare più inverter tra di loro e con dispositivi di terze parti, coordinarne il funzionamento e trasmetterne i dati al CLOUD



SUPERVISIONE

DATAHUB offre una pagina web dedicata per il controllo del sito in rete locale



GESTIONE

Modifica di parametri globali dell'impianto



SCENARI SMART

Logiche di controllo dell'impianto tramite apparati esterni



UPGRADE

Upgrade dei dispositivi in batch



RACCOMANDATO

SU IMPIANTI ESTESI, SENZA CONTROLLO ESPORTAZIONI

- ⚡ Impianti composti da più inverter ibridi, con o senza controllo delle esportazioni
- ⚡ Impianti composti da X3-MEGA G2 o X3-PRO G2 o X3-FORTH in parallelo senza controllo delle esportazioni
- ⚡ Impianti MISTI (che comprendono inverter di stringa e inverter ibridi) senza controllo delle esportazioni

NECESSARIO



- ⚡ Impianti composti da X3-MEGA G2 o X3-PRO G2 o X3-FORTH in parallelo con controllo delle esportazioni
- ⚡ Impianti composti da più X3-MIC G2 con o senza controllo delle esportazioni
- ⚡ Impianti MISTI (che comprendono inverter di stringa e inverter ibridi) con controllo delle esportazioni

Quando usare il DATAHUB

	CON controllo esportazioni	SENZA controllo esportazioni	Note
MIC	Da 2 a 60 pcs : 1 DATAHUB + 1 METER	Da 2 a 60 pcs : 1 DATAHUB	
PRO	Da 2 a 10 pcs: 1 Dongle per ognuno + 1 METER o DATAHUB + 1 METER 11 a 60 pcs : DATAHUB + 1 METER	2 a 10 pcs: 1 Dongle per ognuno o DATAHUB 11 a 60 pcs : 1 DATAHUB	
MEGA	2 a 10 pcs: 1 Dongle per ognuno + 1 METER o DATAHUB + 1 METER 11 a 60 pcs : 1 DATAHUB + 1 METER	2 a 10 pcs: 1 Dongle per ognuno o DATAHUB 11 a 60 pcs : 1 DATAHUB	Firmware in fase di sviluppo
FORTH	2 a 10 pcs: 1 Dongle per ognuno + 1 METER o DATAHUB + 1 METER 11 a 60 pcs : 1 DATAHUB + 1 METER	2 a 10 pcs: 1 Dongle per ognuno o DATAHUB 11 a 60 pcs : 1 DATAHUB	

Inverter ON-GRID compatibili

X3-MEGA G2

X3-PRO G2

X3-FORTH

X3-MIC G2

Inverter IBRIDI compatibili

X3-HIBRID G4

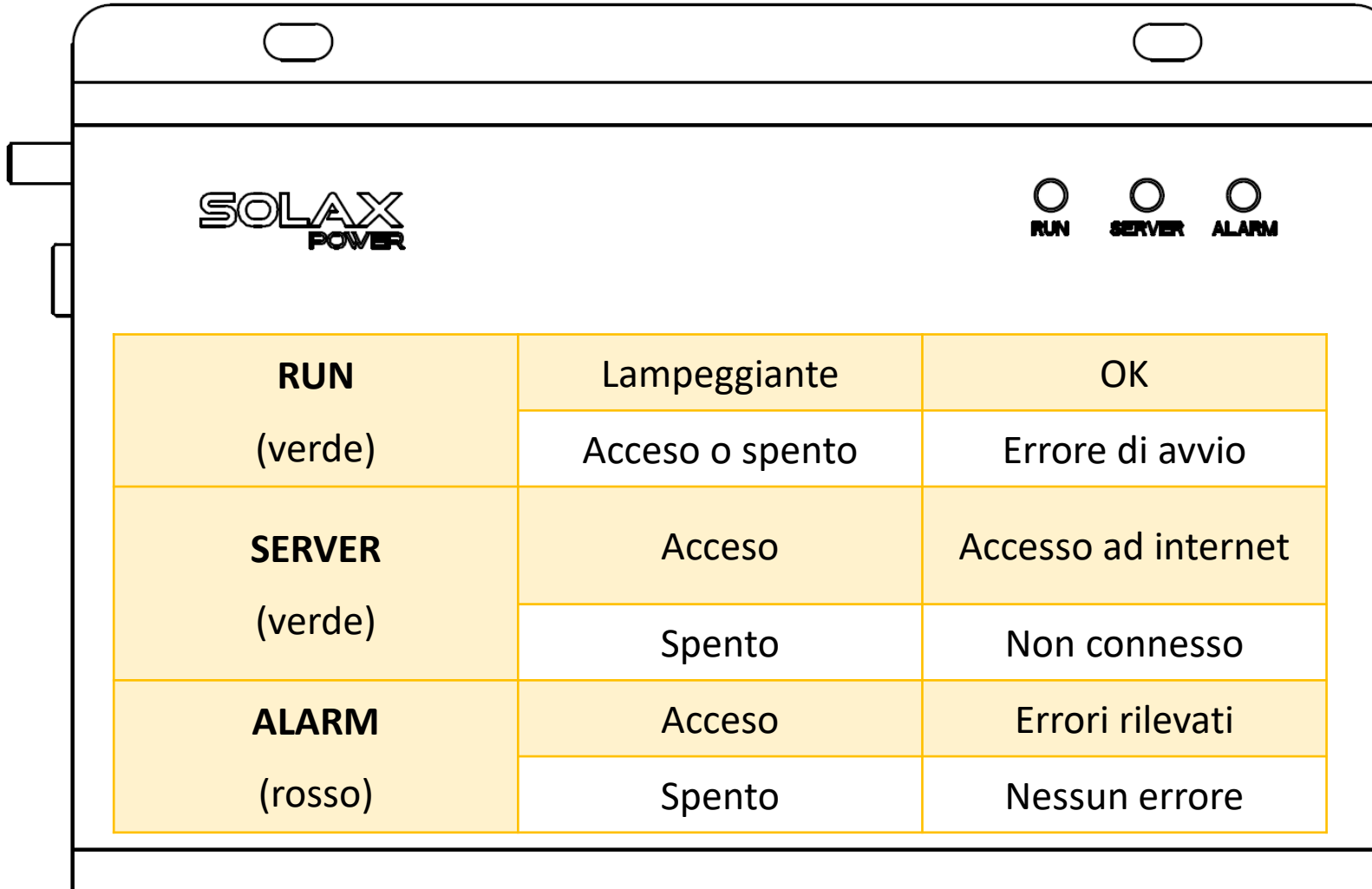
X3-FIT G4

Fino a 60 inverter ON-GRID, con soli inverter ON-GRID

Fino a 10 inverter IBRIDI

Fino a 40 inverter ON-GRID + 10 inverter IBRIDI

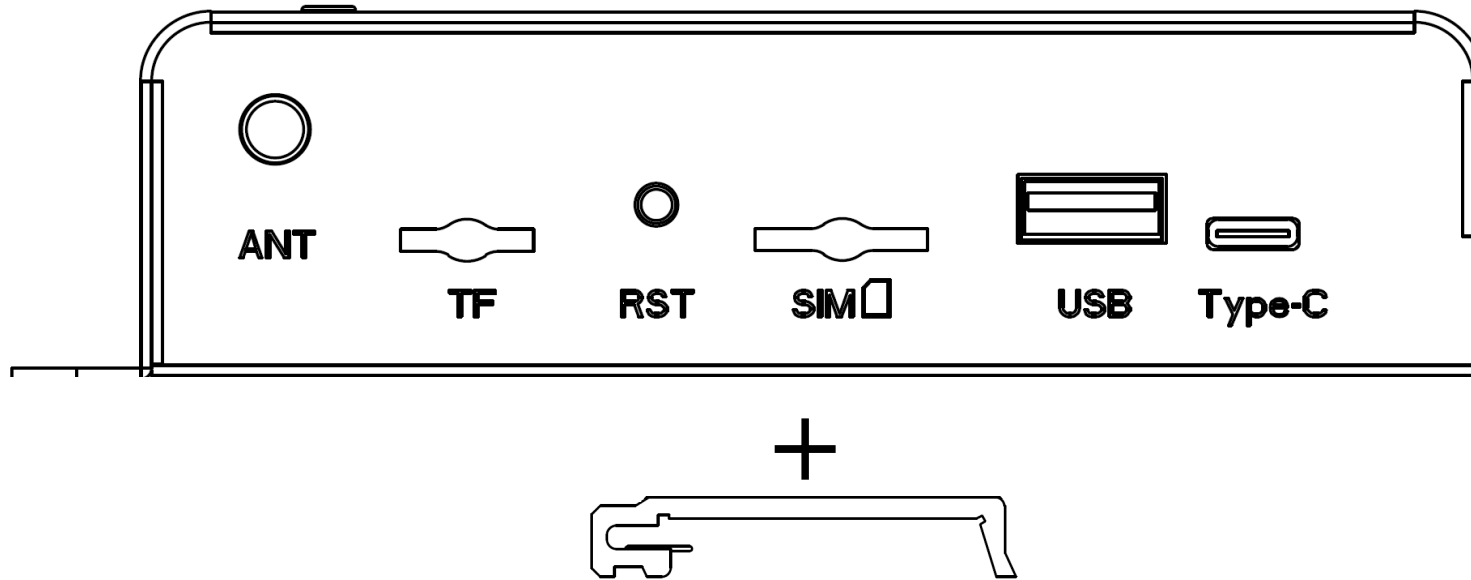
Hardware overview



The diagram shows a SOLAX POWER device with a control panel. On the left side, there are two rectangular buttons. The panel features the SOLAX POWER logo on the left and three indicator lights on the right, labeled RUN, SERVER, and ALARM. Below the lights is a table detailing the status of each light.

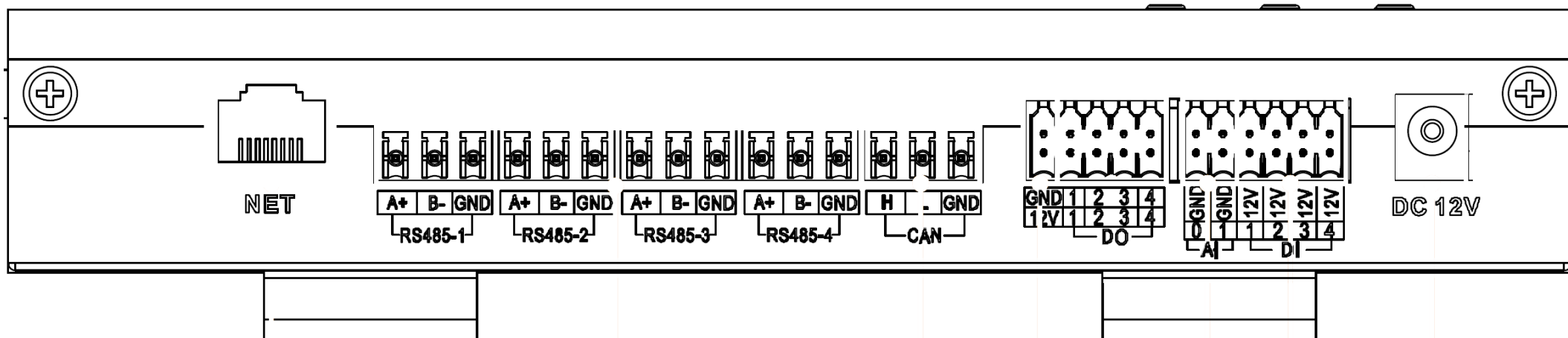
RUN (verde)	Lampeggiante	OK
	Acceso o spento	Errore di avvio
SERVER (verde)	Acceso	Accesso ad internet
	Spento	Non connesso
ALARM (rosso)	Acceso	Errori rilevati
	Spento	Nessun errore

Hardware overview



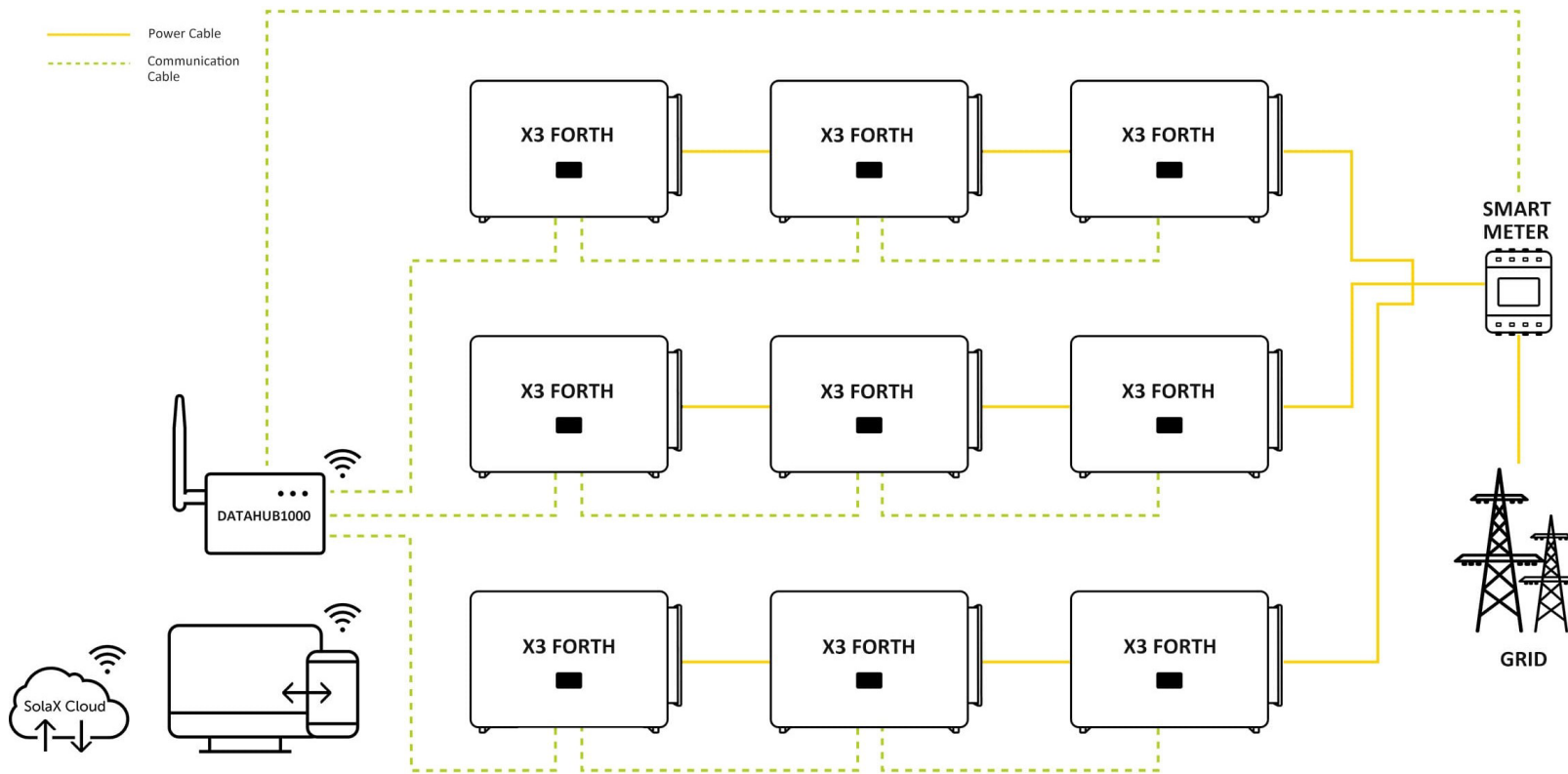
ANT	Antenna esterna SMA
TF	Micro SD card fino a 16 GB
RST	Reset
SIM	SIM card (usi futuri)
USB	Pota USB tipo A (usi futuri)
Type-C	Pota USB Type C (usi futuri)

Hardware overview



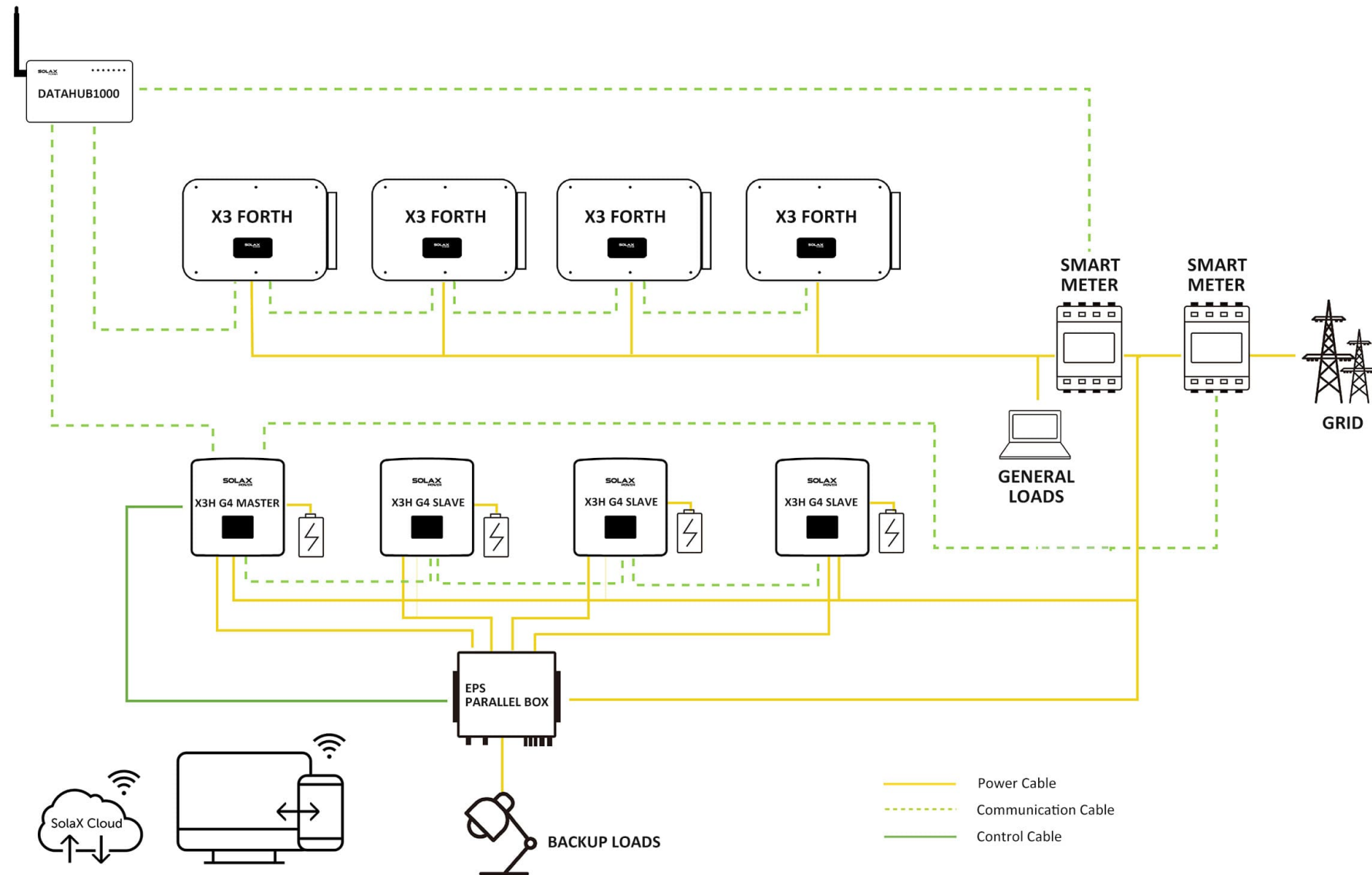
NET	Rete 10/1000 Mbps		
RS485 1 / 2 / 3 / 4	Pote RS485	A	+
	Inverter / meter	B	-
		GND	Schermatura
	CAN	Pota CAN	H
(usi futuri)		L	Basso
		GND	Schermatura
DO	Uscita digitale	1,2,3,4	+
	Max 30 VDC/2A	GND	-
AI	Ingresso analogico	A10, A11	+
	0-12 VDC	GND	-
DI	Ingresso digitale	1,2,3,4	
	Contatto pulito	12V1, 12V2, 12V3, 12V4	
DC12V	Alimentazione (in dotazione)		

Impianto ON-GRID



Fino a 60 inverter di stringa
⚡
20 inverter per ogni linea dati
⚡
Gli inverter sulla stessa linea dati
devono essere dello stesso
modello

Impianto MISTO



Fino a 40 inverter di stringa +

10 ibridi



Gli inverter di stringa caricano

le batterie



Gli inverter sulla stessa linea

dati devono essere dello

stesso modello



Sono necessari 2 meter per il

controllo esportazione



DT-SU666 / DT-SU666-CT

Fornito da SolaX



Per gli inverter ibridi è possibile usare i CT

in dotazione



CT alternativi





SOLAX
POWER

DATAHUB1000
CONFIGURAZIONE IMPIANTO MISTO

X Schema impianto

X Cablaggio dispositivi

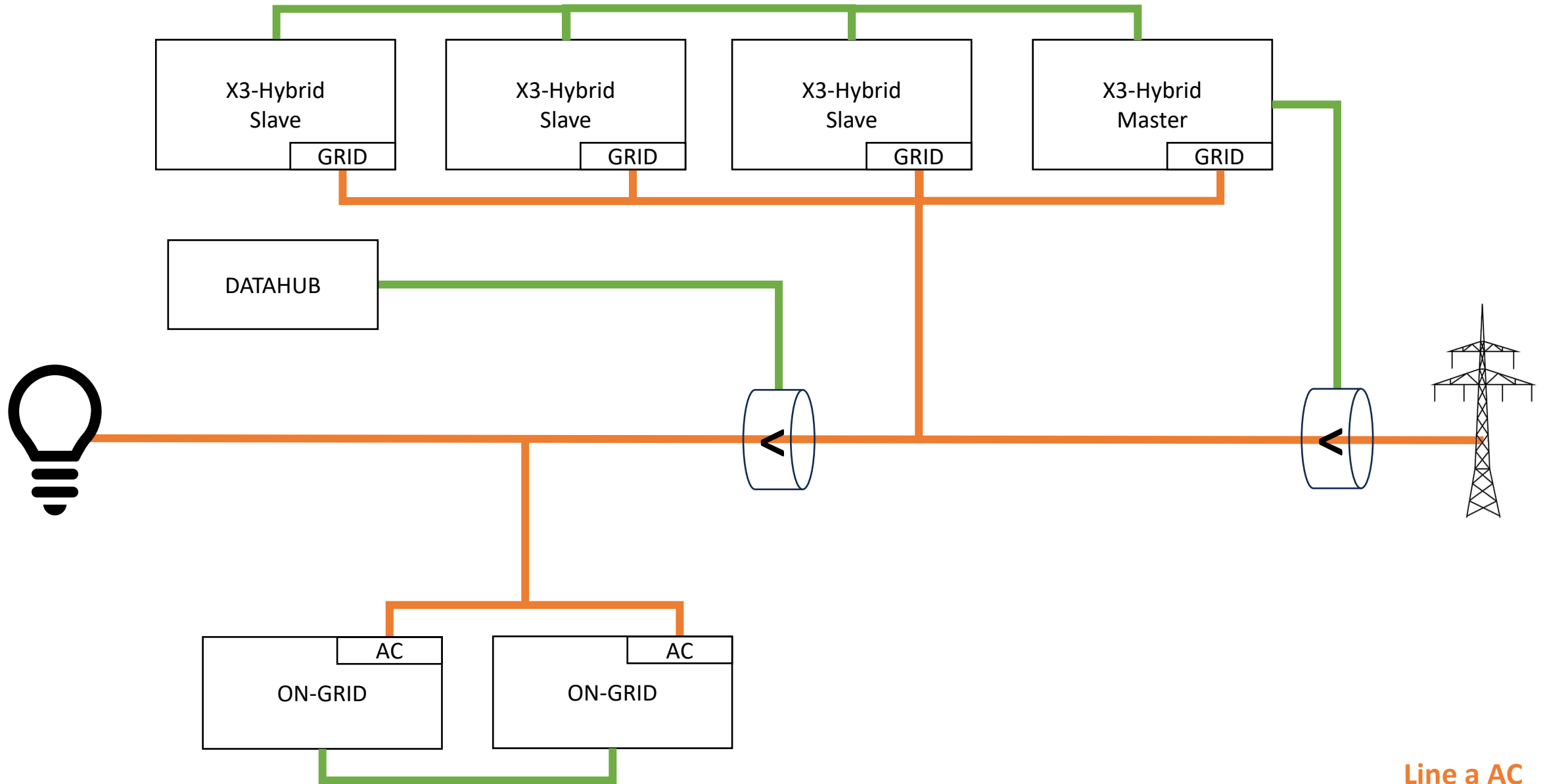
X Impostazioni inverter

X Impostazioni DATAHUB

X DATAHUB live

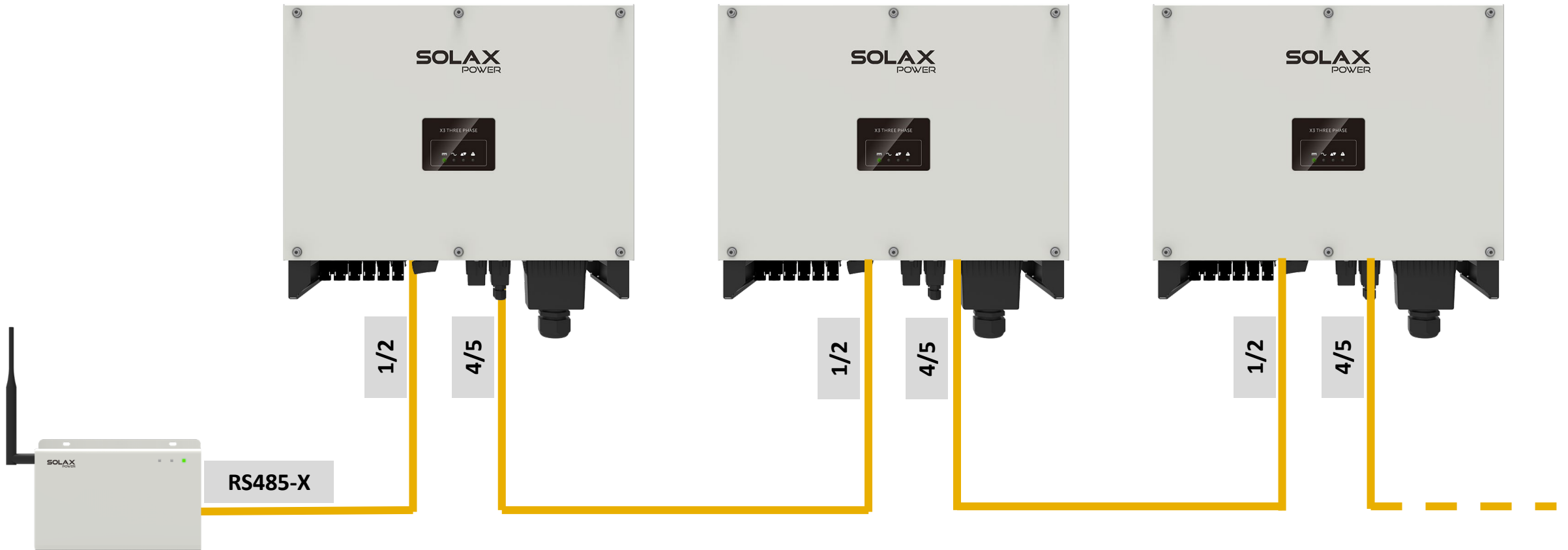


Schema impianto MISTO

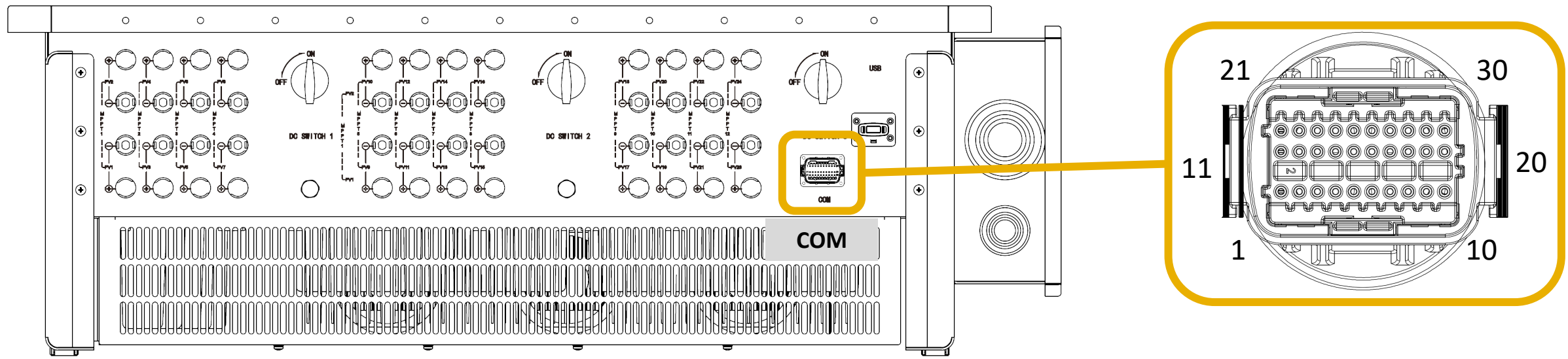


Line a AC
Linea DATI

Cablaggio X3-FoTH / X3-MEGA-G2



Cablaggio X3-FoTH / X3-MEGA-G2



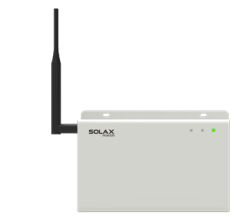
PRIMO
Inverter della linea

- 1** RS485A IN+
- 2** RS485B IN-
- 3** GND

- 4** RS485A OUT +
- 5** RS485B OUT -
- 6** GND

DATAHUB

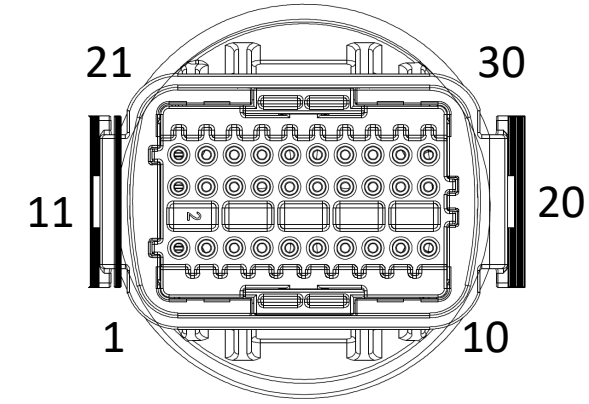
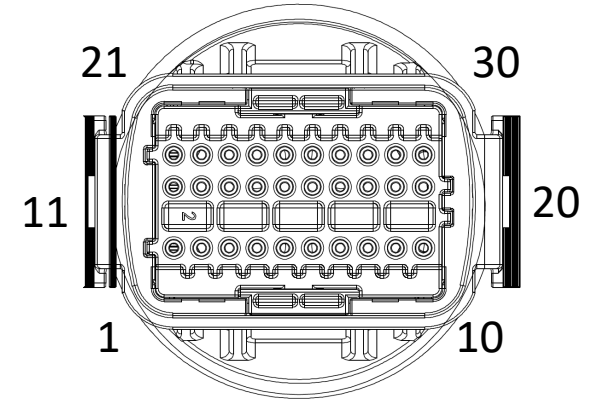
Inverter successivo
PIN 1/2



Cablaggio X3-FoTH / X3-MEGA-G2



PRIMO
Inverter della linea



SECONDO
Inverter della linea

- 1 RS485A IN+
- 2 RS485B IN- DATAHUB
- 3 GND



- 4 RS485A OUT + Inverter successivo
- 5 RS485B OUT - PIN 1/2
- 6 GND



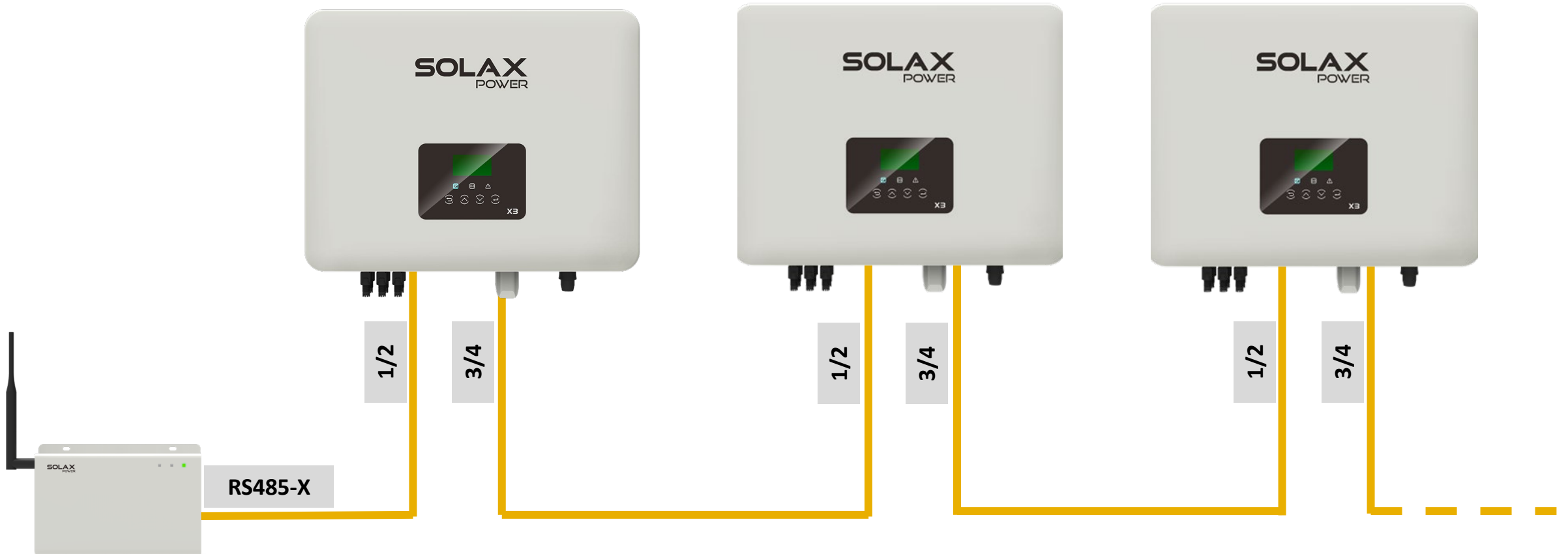
- 1 RS485A IN+
- 2 RS485B IN- Inverter precedente
- 3 GND PIN 4/5



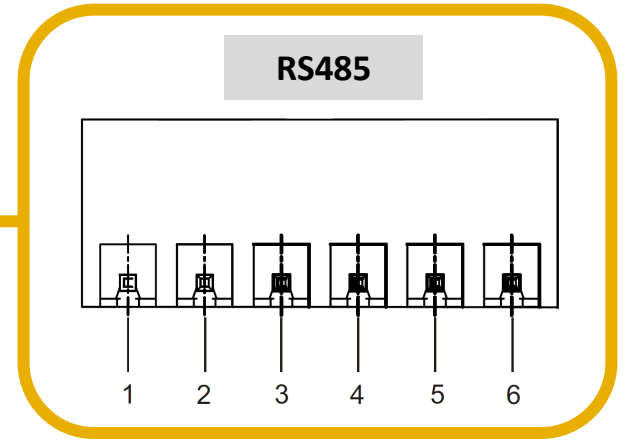
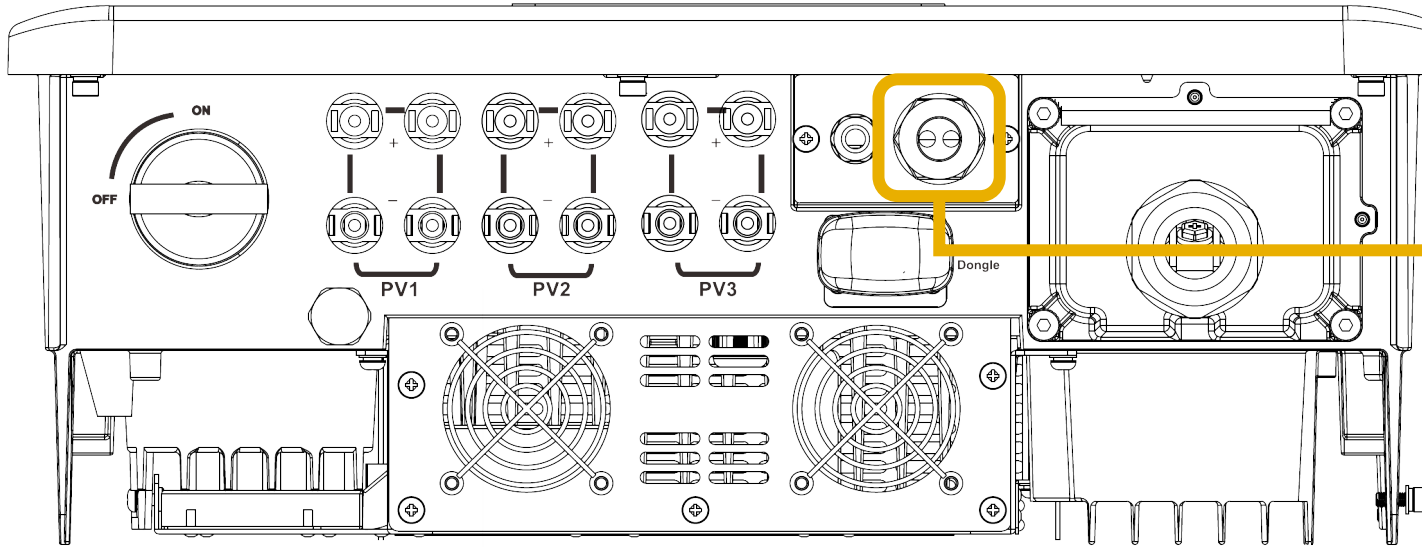
- 4 RS485A OUT + Inverter successivo
- 5 RS485B OUT - PIN 1/2
- 6 GND



Cablaggio X3-PRO



Cablaggio X3-PRO

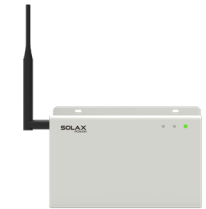


PRIMO
Inverter della linea

- 1** RS485A +
- 2** RS485B -

- 3** RS485A +
- 4** RS485B -

DATAHUB



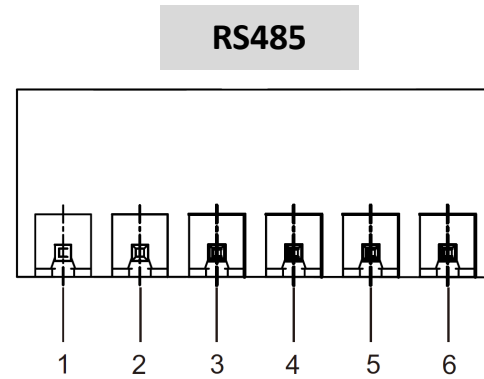
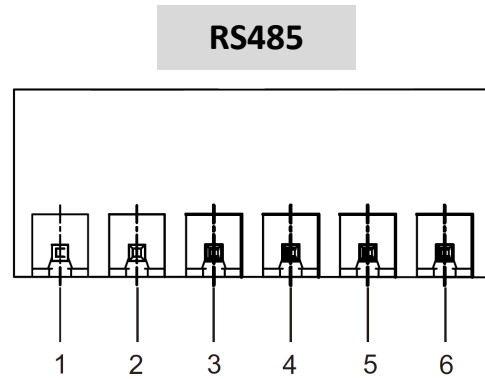
Inverter successivo

PIN 1/2



Cablaggio X3-PRO

PRIMO
Inverter della linea



SECONDO
Inverter della linea

1 RS485A +

AI

2 RS485B -

DATAHUB



1 RS485A +

Dall' inverter precedente

2 RS485B -

PIN 3/4



3 RS485A +

All' inverter successivo

4 RS485B -

PIN 1/2



3 RS485A +

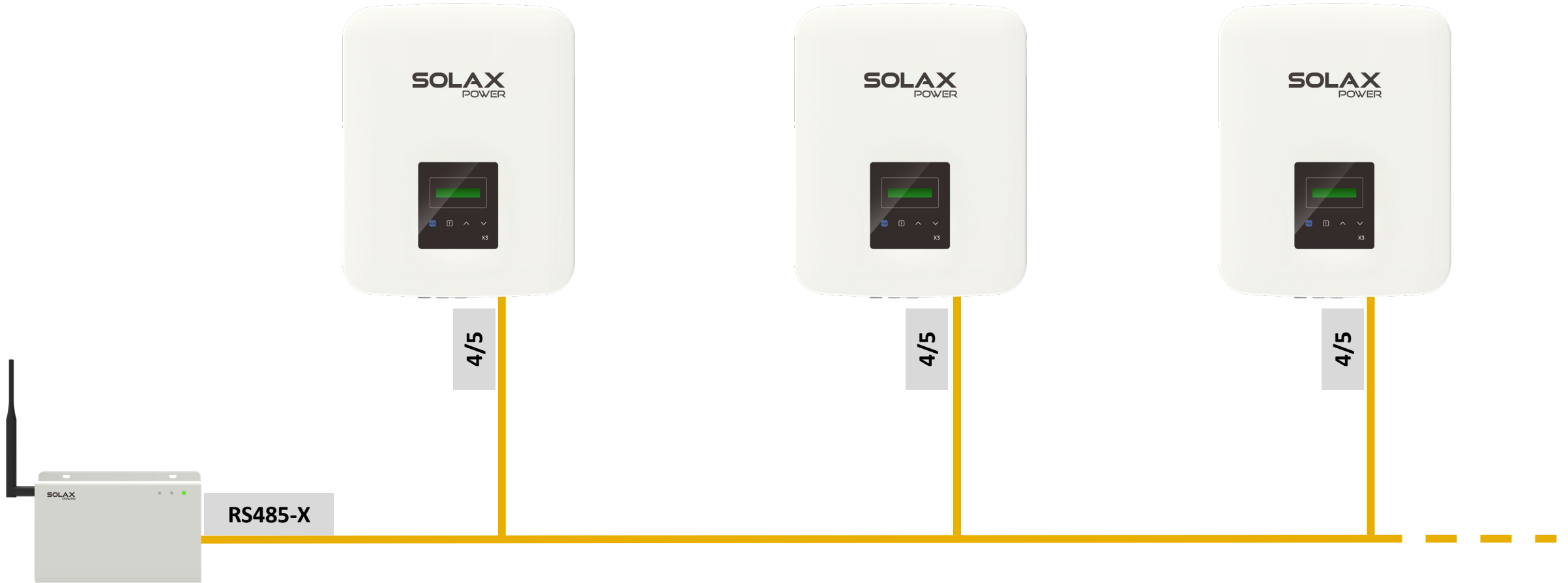
All' inverter successivo

4 RS485B -

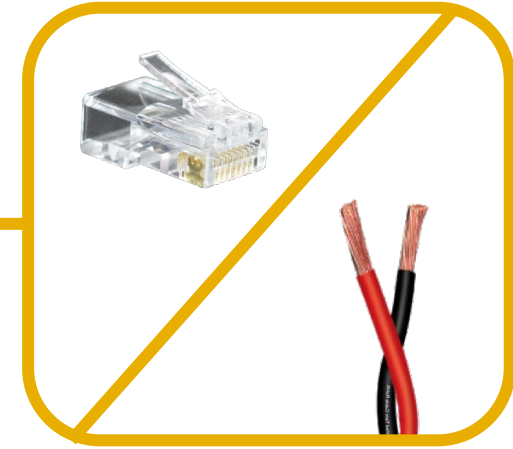
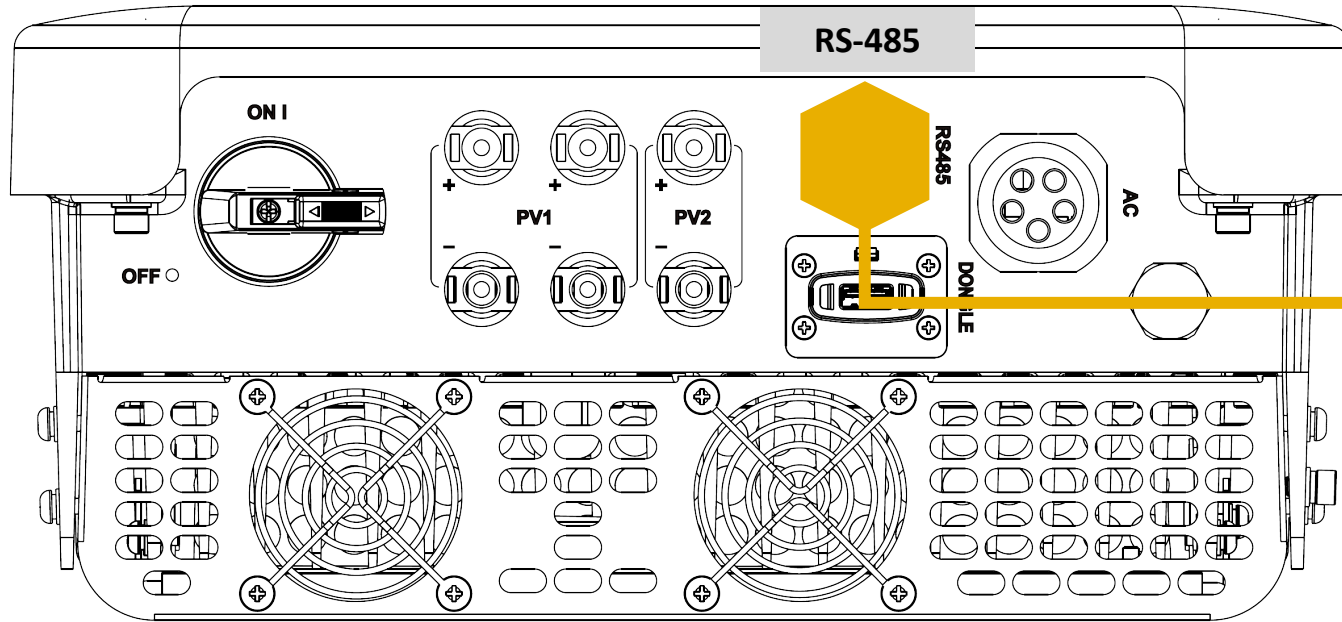
PIN 1/2



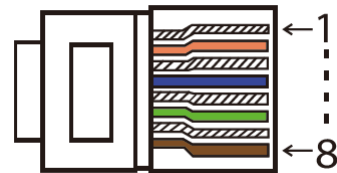
Cablaggio X3-MIC



Cablaggio X3-MIC

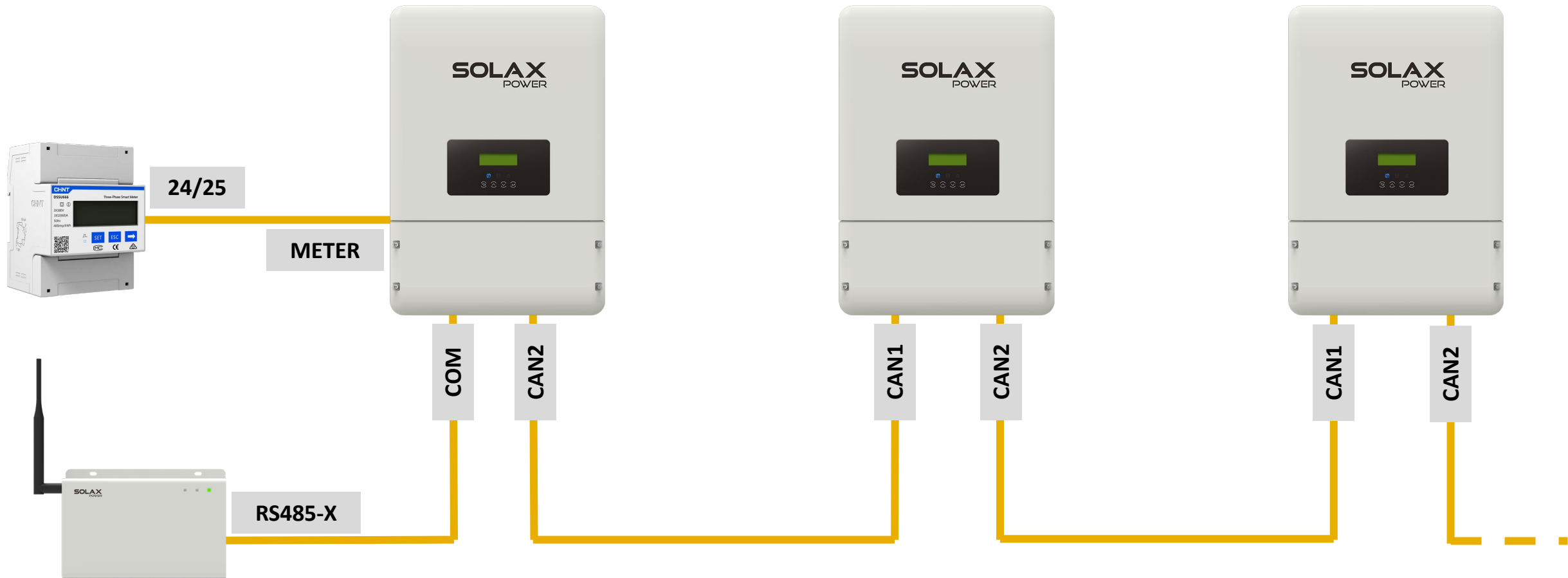


Linea RS485 in parallelo
su tutti gli inverter /
DATAHUB



PIN	1	2	3	4	5	6	7	8
Definition	X	X	X	485_A	485_B	X	X	X

Cablaggio X3-HYBRID

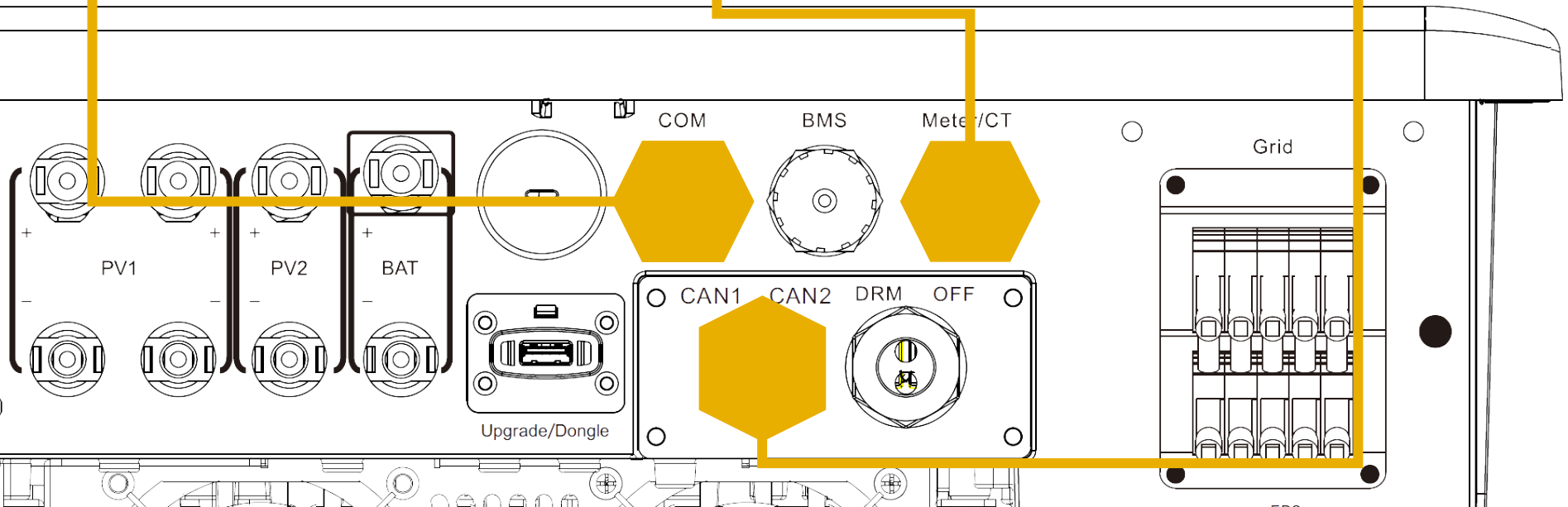


Cablaggio X3-HYBRID

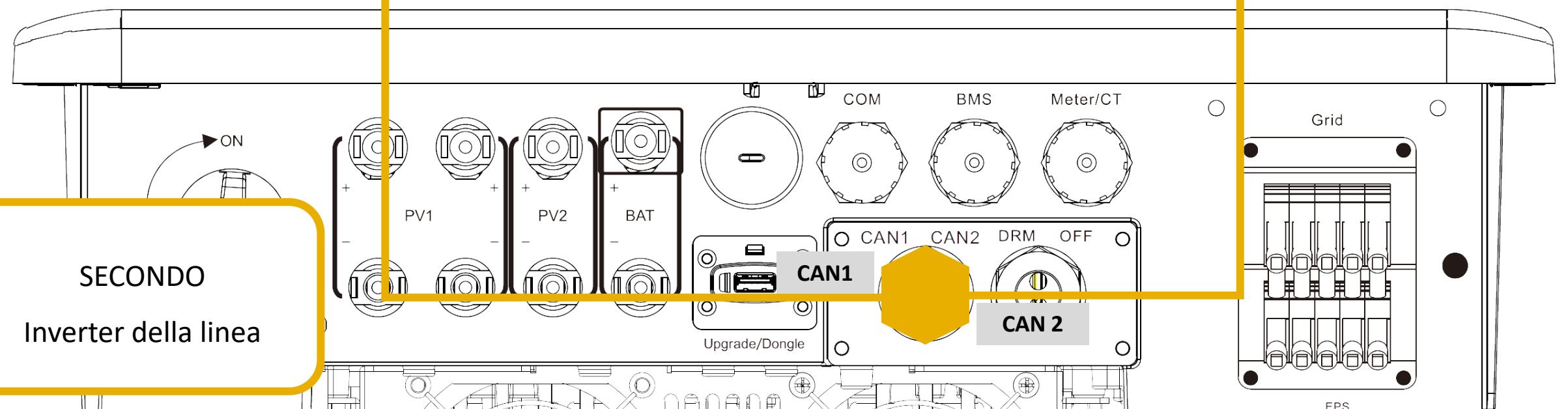
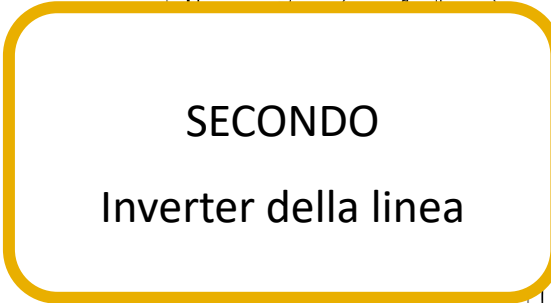
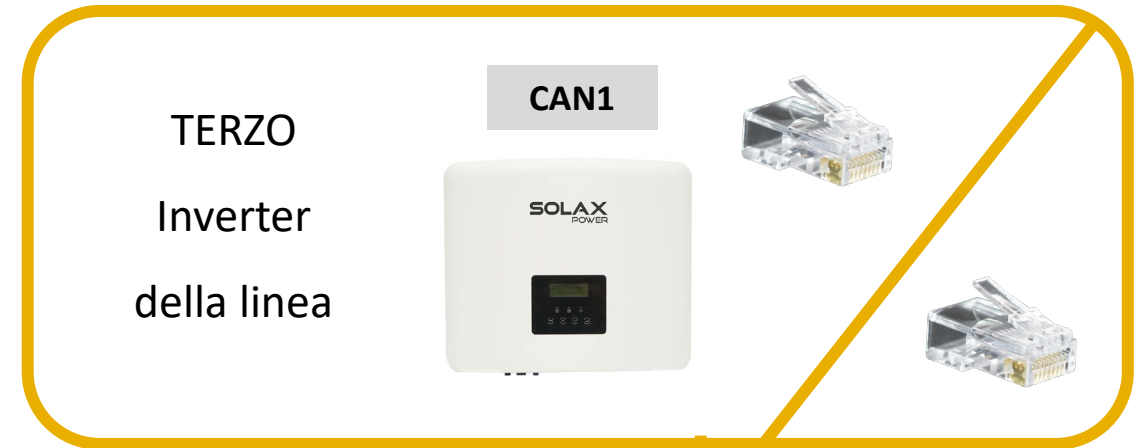


COM METER CAN 2

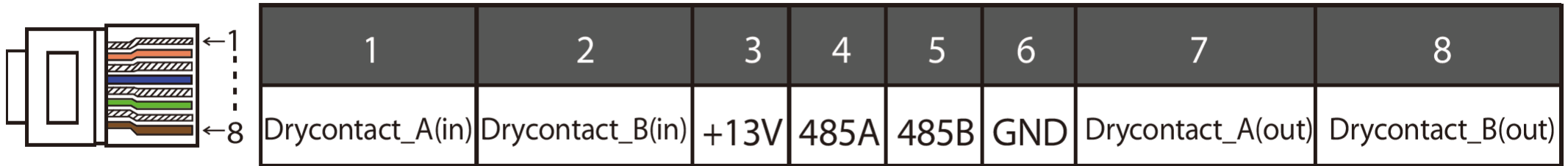
PRIMO
Inverter della linea



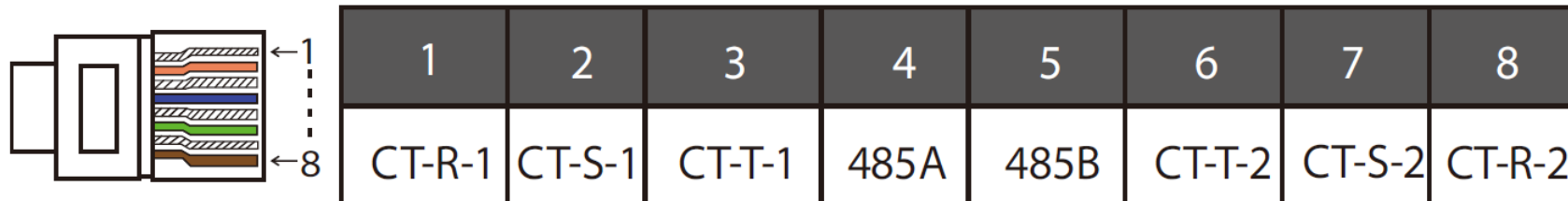
Cablaggio X3-HYBRID



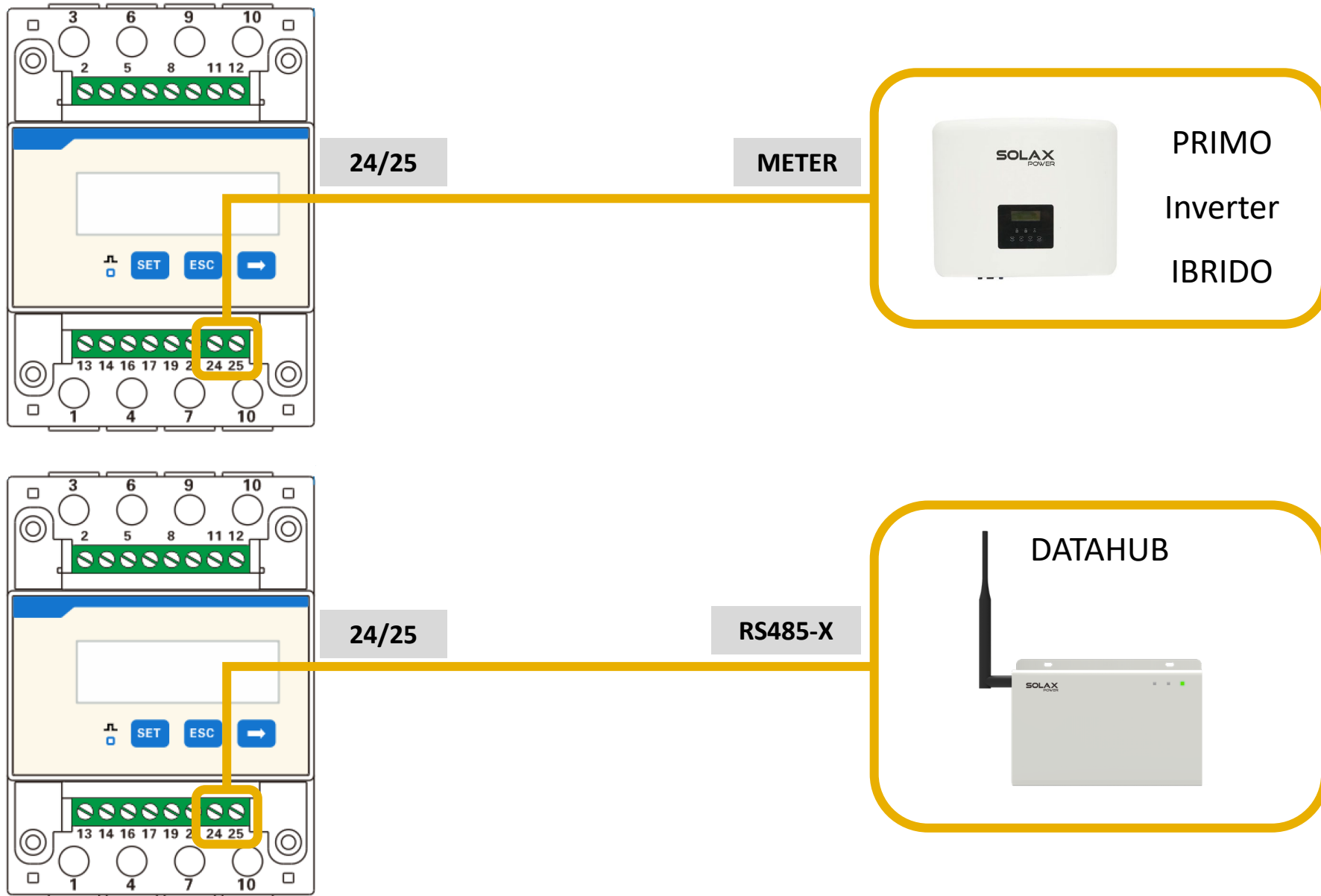
Pota COM verso il DATAHUB



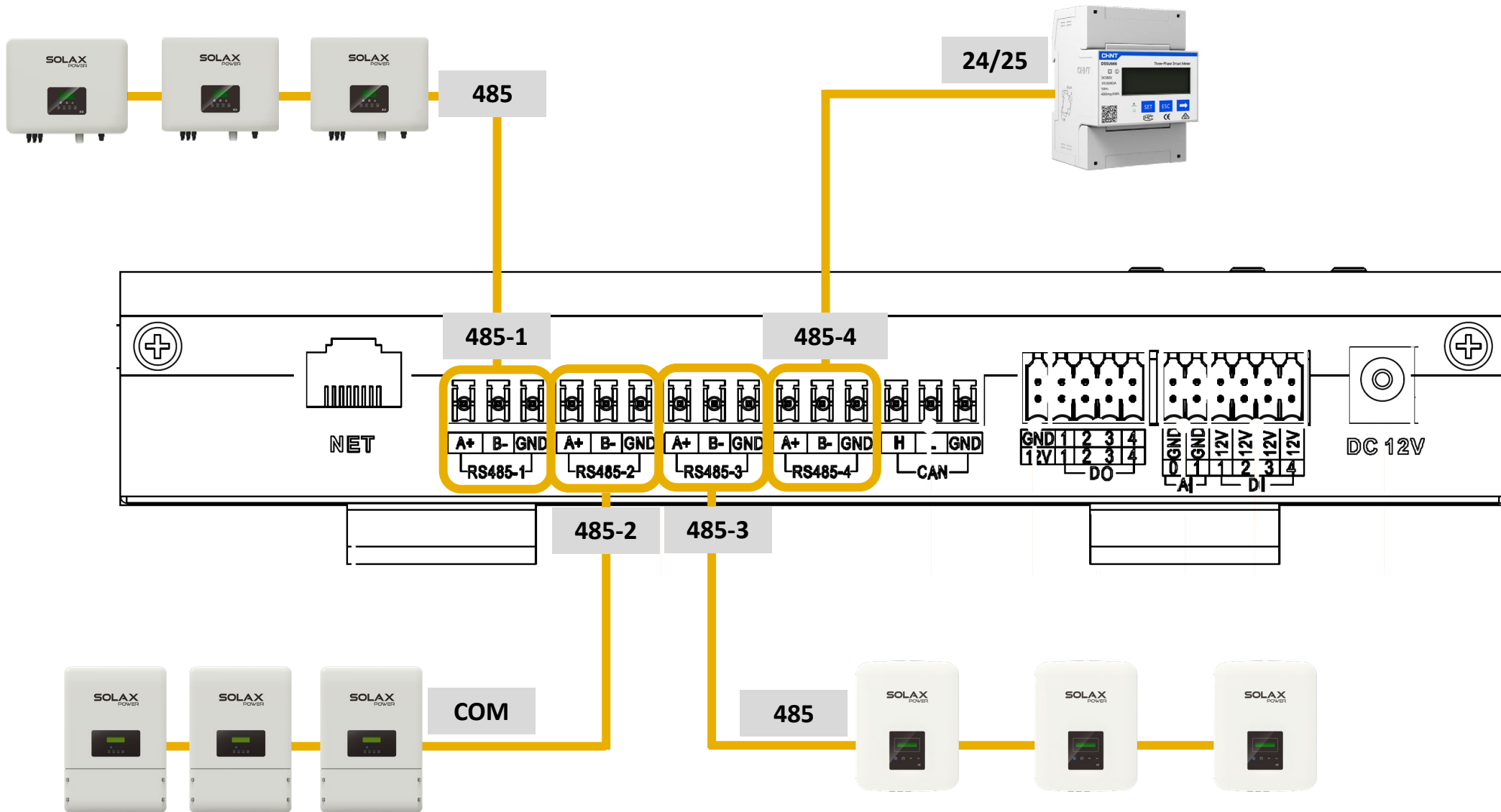
Pota METER / CT verso il METER



Cablaggio METER



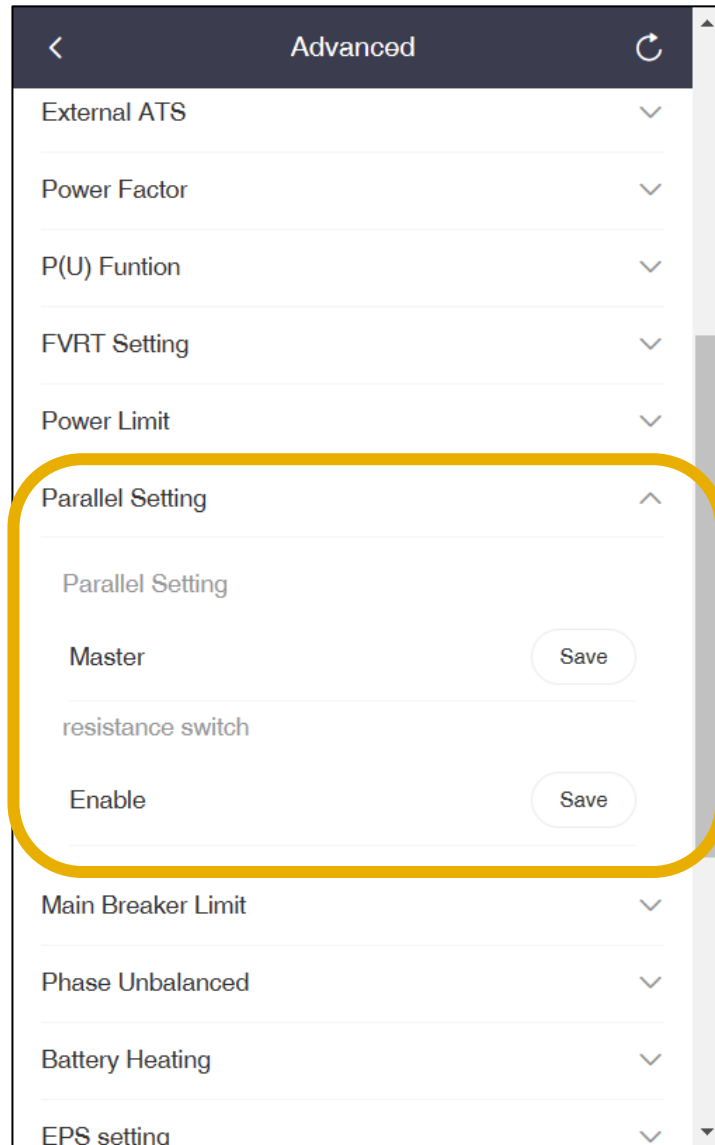
Cablaggio DATAHUB



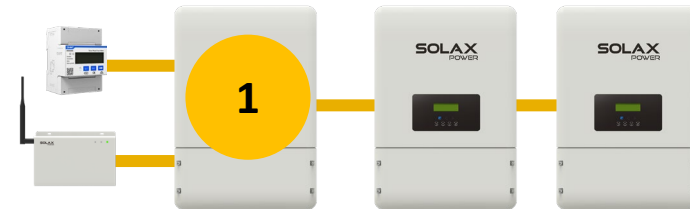


- ⚡ Non passare cavi dati insieme a cavi in tensione
- ⚡ Distanza massima raccomandata 800 m
- ⚡ Usare un cavo schermato sopra i 3 m
- ⚡ Collegare alla terra la schermatura di ogni cavo da un solo lato
- ⚡ Non lasciare parti di cavo con i conduttori non twistati
- ⚡ 0.22 – 0.5 mm² fino a 300 m
- ⚡ 0.5 – 0.75 mm² fino a 1200 m
- ⚡ Attivare la resistenza di terminazione sul primo e sull'ultimo inverter

Impostazioni inverter IBRIDI



Impostare come MASTER
il PRIMO Inverter della linea



Impostazioni



Avanzate



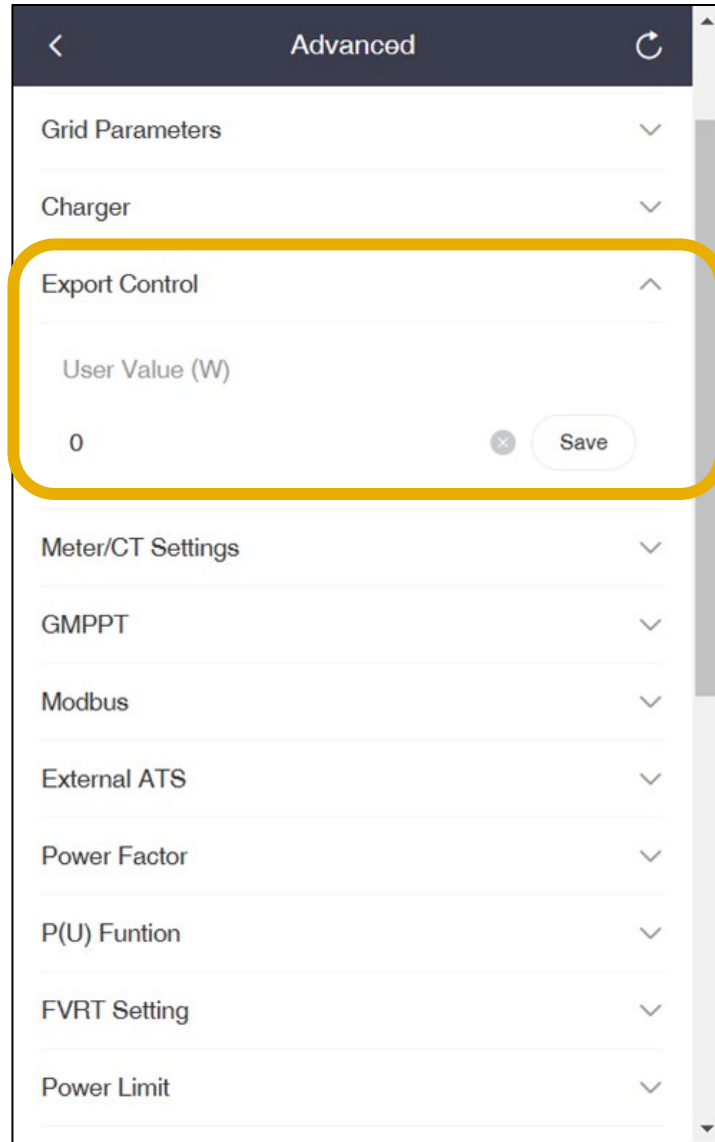
Parallel Setting



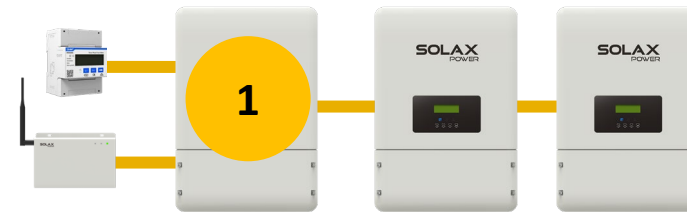
Parallel setting → MASTER

Resistance switch → ENABLE

Impostazioni inverter IBRIDI



Limitare le esportazioni (se necessario)
sul PRIMO Inverter della linea



Impostazioni



Avanzate

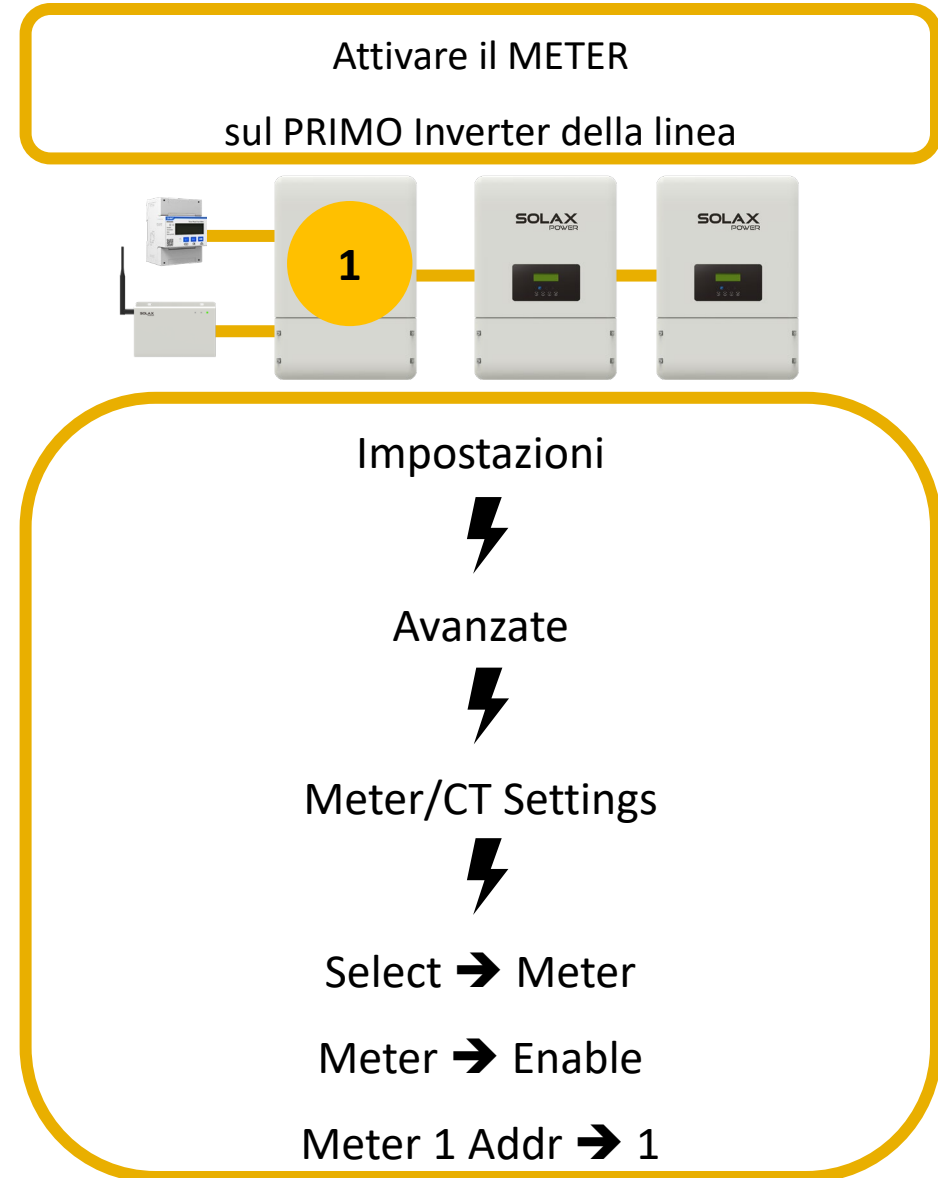
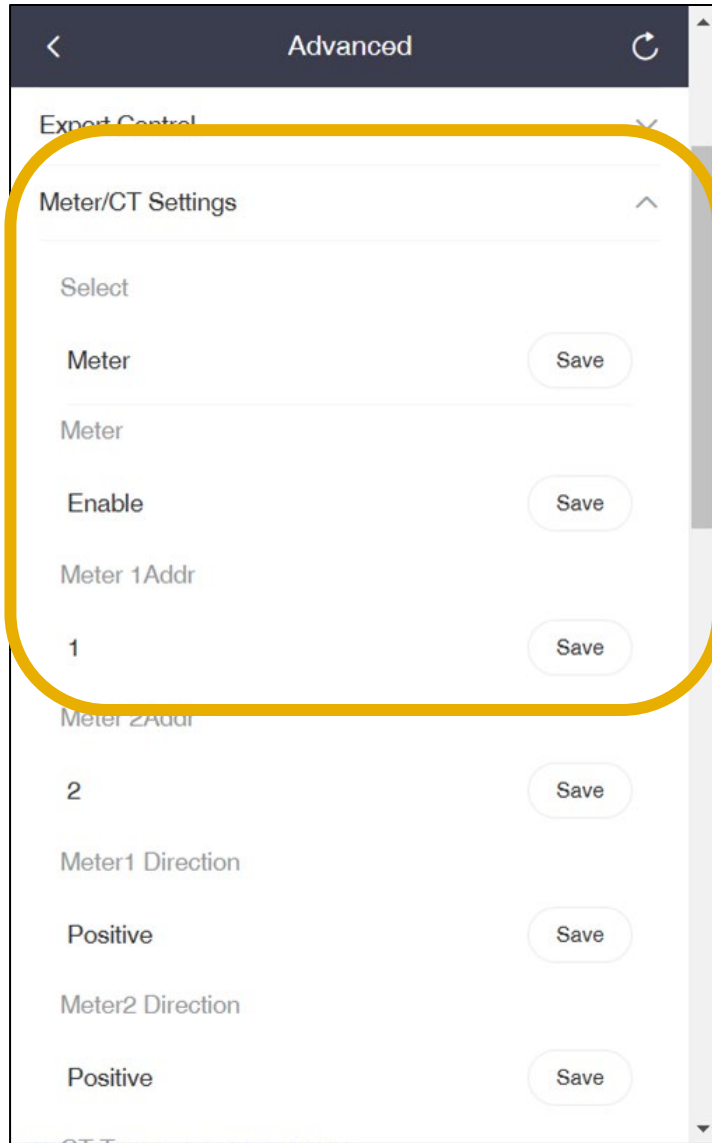


Export Control

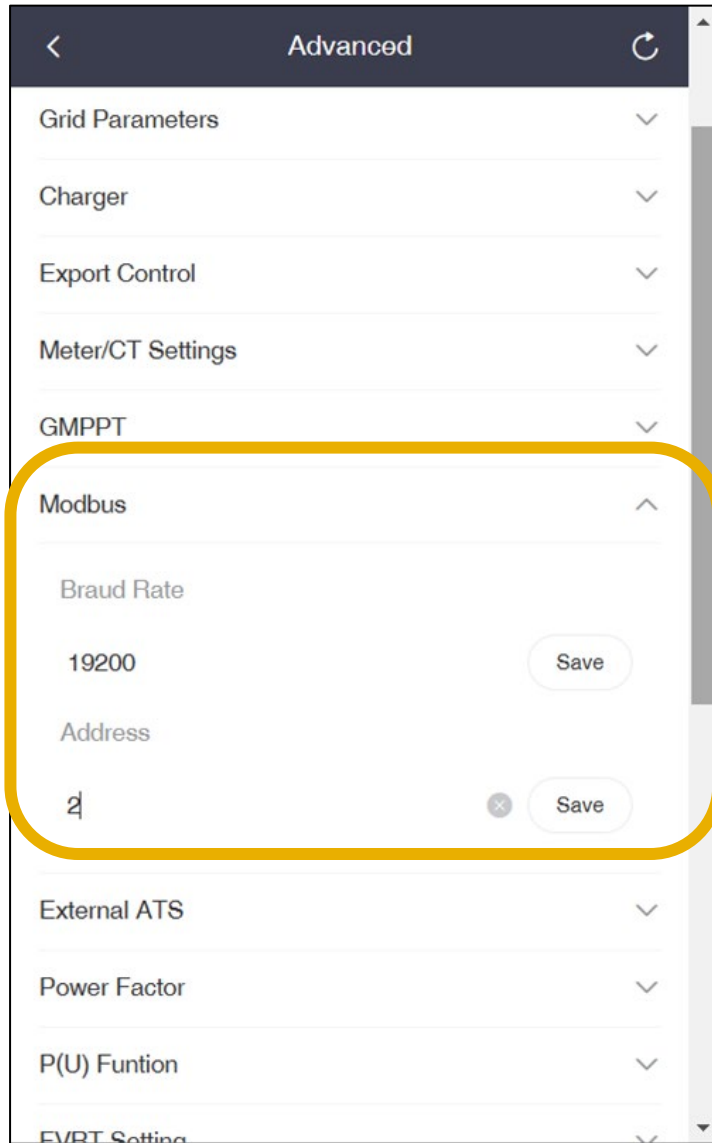


User Value (W) → 0?

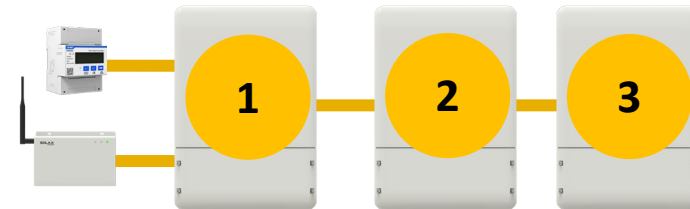
Impostazioni inverter IBRIDI



Impostazioni inverter IBRIDI



Impostare l'indirizzo modbus in ordine crescente dal primo inverter slave



Impostazioni



Avanzate

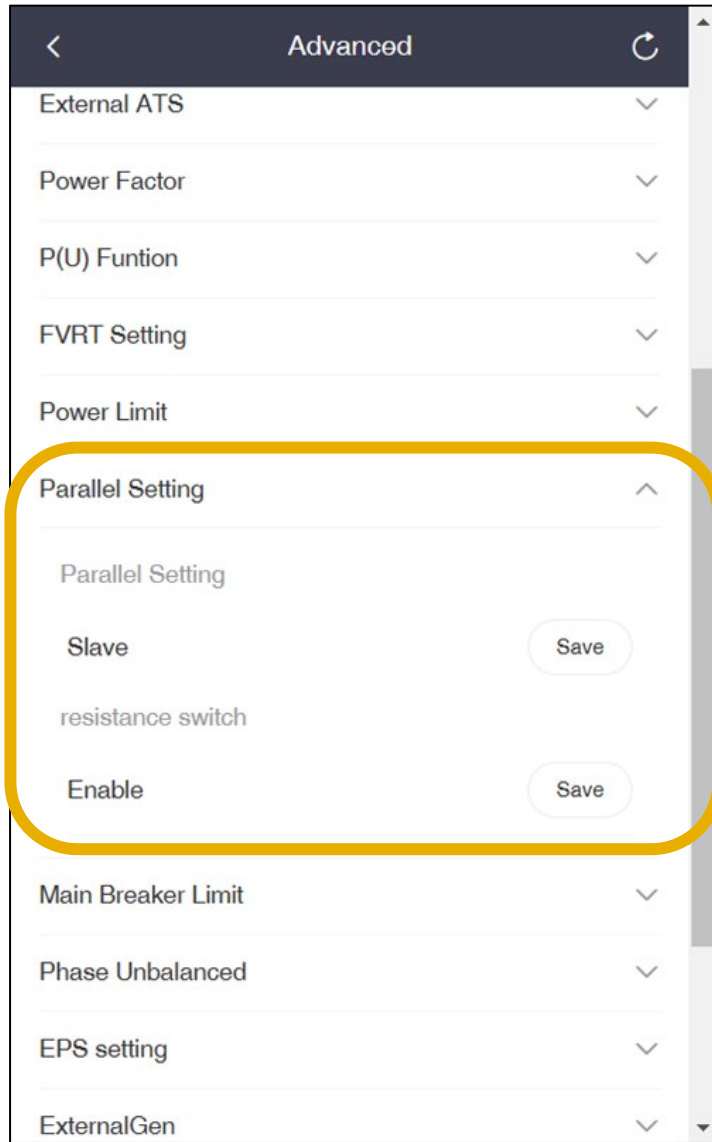


Modbus



Address → 2 - 3 - 4 - ...

Impostazioni inverter IBRIDI



Attivare la resistenza di chiusura
sull' ULTIMO inverter della linea



Impostazioni



Avanzate

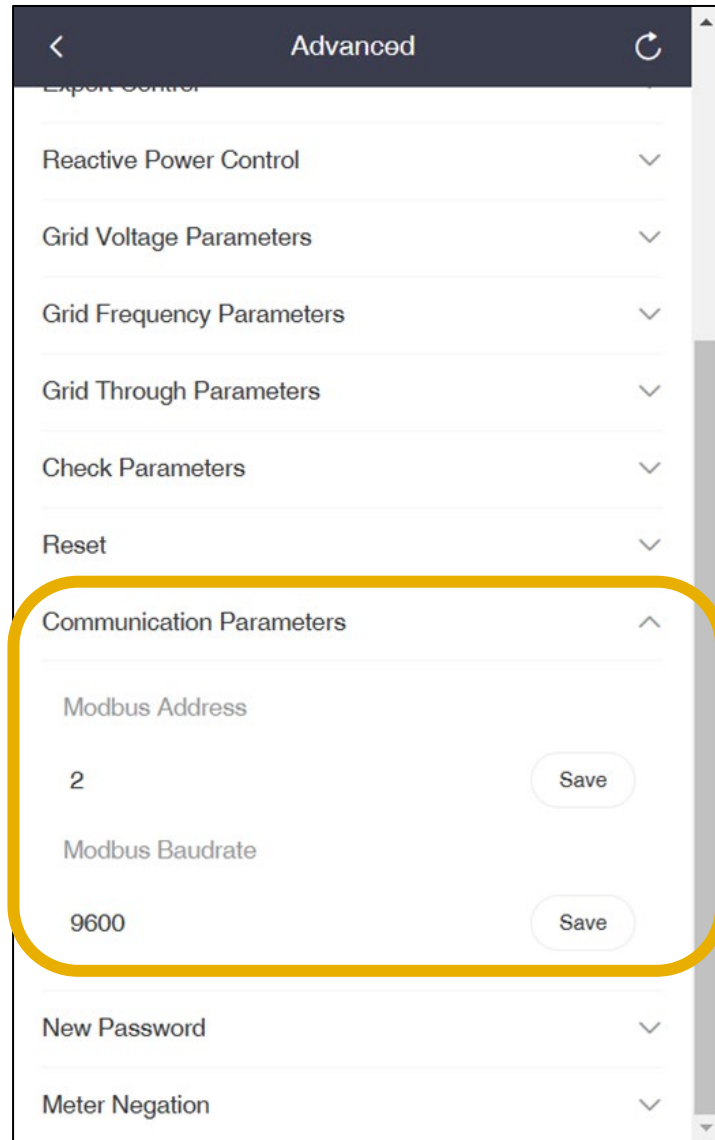


Parallel Setting

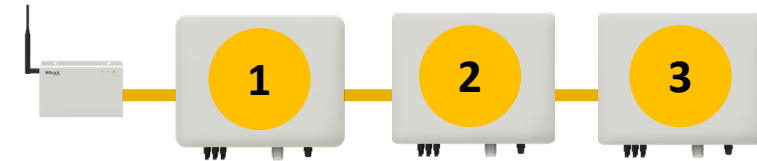


Resistance switch → ENABLE

Impostazioni inverter ON-GRID



Impostare l'indirizzo modbus in ordine crescente
sugli inverter ON-GRID



Impostazioni



Avanzate



Communication Parameters



Modbus Address → 2 – 3 – 4 - ...

Modbus Baudrate → 9600

Impostazioni DATAHUB



Browser tabs: (1) WhatsApp, [Dec 14 2022 Webinar] Sol..., datacenter - Ricerca Goog..., DataHub, datahub 1000 solax - Ricer..., Datahub1000 - Solax Pow..., DATAHUB1000-POCKET-3..., grid tie inverter vs hybrid..., SOLAX X3-MIC - Ricerca G..., Rules to do perfect cabling, DataHub

Browser address bar: Non sicuro | 192.168.10.10/#device_add

Browser bookmarks: Rintonauti due t..., Le sospensioni: co..., The Gauntlet Progr..., NAS, Solax, Passaporto Elettron...

Altri Preferiti

admin | Select Language | Log Out

SOLAX POWER

Overview
Site Management
Add Device
Device Detail
Site Setting
Inverter Setting
Smart Scene
Inverter Upgrade
DataHub Setting

RS485 Channel	Device Type	Initial Address	Number of Devices
1	Inverter	1	4
2	Inverter	1	4
3	Meter	1	1
4	Inverter	0	0

Check Device Detail

Save

17:49
20/08/2023

Impostazioni DATAHUB



Site Management



Site Setting



Inverter Setting



Smart Scene



Inverter Upgrade



DataHub Setting

Internet Setting

Time Setting

Serial Port Setting

Other Setting

DataHub Info

DataHub Upgrade

Serial Port Setting

RS485 Channel	Agreement Type	Baud Rate	Verification Method	Stop Bit
1	modbus	19200	No Verification	1
2	modbus	1200	No Verification	1
3	modbus	2400	No Verification	1
4	modbus	4800	No Verification	1

Baud Rate dropdown menu with options: 1200, 2400, 4800, 9600, 19200 (selected), 38400, 115200.

Save

IBRIDI: 19200
ON-GRID: 9600
EVC: 9600
METER: 9600

Impostazioni DATAHUB



Overview



Site Management



Site Setting

Export limit Control

Power Control

Other Setting



Inverter Setting



Smart Scene



Inverter Upgrade



DataHub Setting

Export Limit Control

Enable **Disable** Enable

Control Mode

Feed-in Buffer

* Export Power(%)

Feedin [+], Consumed [-]

Reset

Submit

Control mode : Total / Per Phase
Feed-in Buffer: Disable / Low / Mid / High

Feed-in Buffer

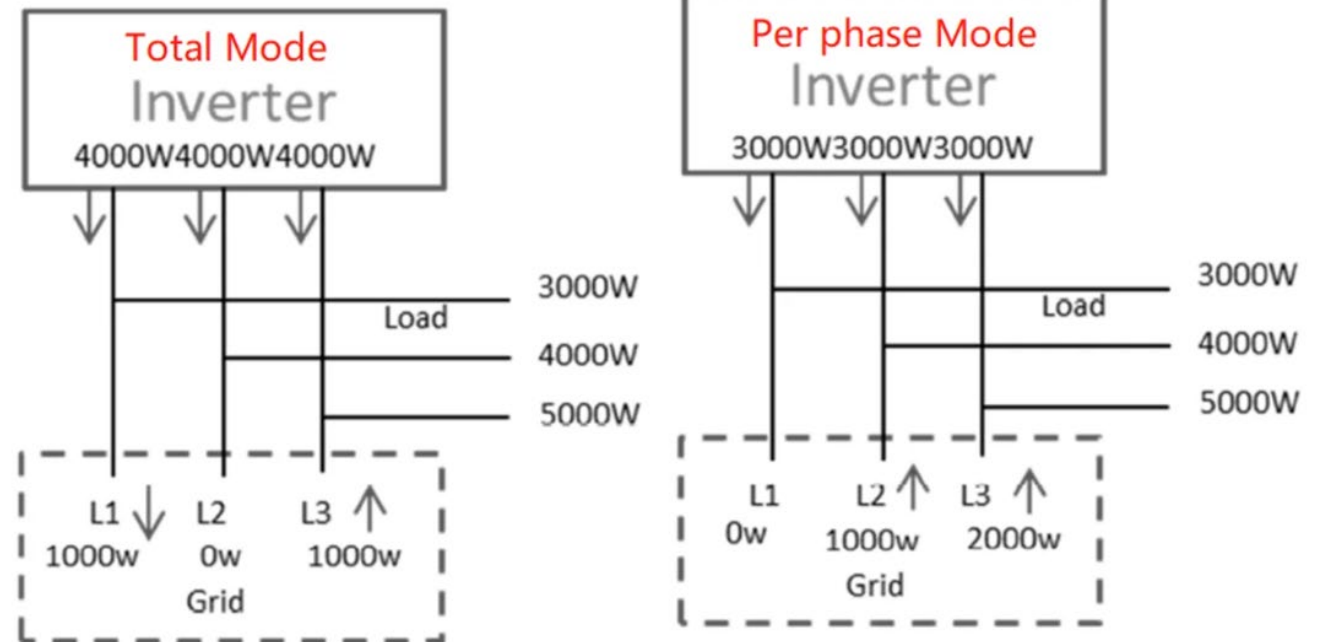
Disable / Low / Mid / High

OFF: 1%. Usare questa impostazione con carichi stabili. La produzione fluttua tra +/- 1% rispetto al valore impostato. L'esportazione potrebbe non essere esattamente 0, ma non verrà prelevata energia della rete

Low: 2.5% / Middle: 4.5% / High 6.5%

Energia prelevata dalla rete = Potenza nominale del sito * %

Control mode : Total / Per Phase



Impostazioni DATAHUB



- Site Management
- Site Setting
- Inverter Setting
- Smart Scene
- Inverter Upgrade
- DataHub Setting
- Internet Setting**
- Time Setting
- Serial Port Setting
- Other Setting
- DataHub Info
- DataHub Upgrade

Time Setting

* Time Setting Mode: Time Synchronization

Select Time Zone: (UTC+01:00) Europe/Berlin

- (UTC+00:00) Atlantic/Reykjavik
- (UTC+00:00) Europe/London
- (UTC+00:00) Etc/GMT
- (UTC+01:00) Europe/Berlin**
- (UTC+01:00) Europe/Paris
- (UTC+01:00) Africa/Lagos
- (UTC+01:00) Europe/Budapest
- (UTC+01:00) Europe/Warsaw



SOLAX
POWER

THANKYOU