

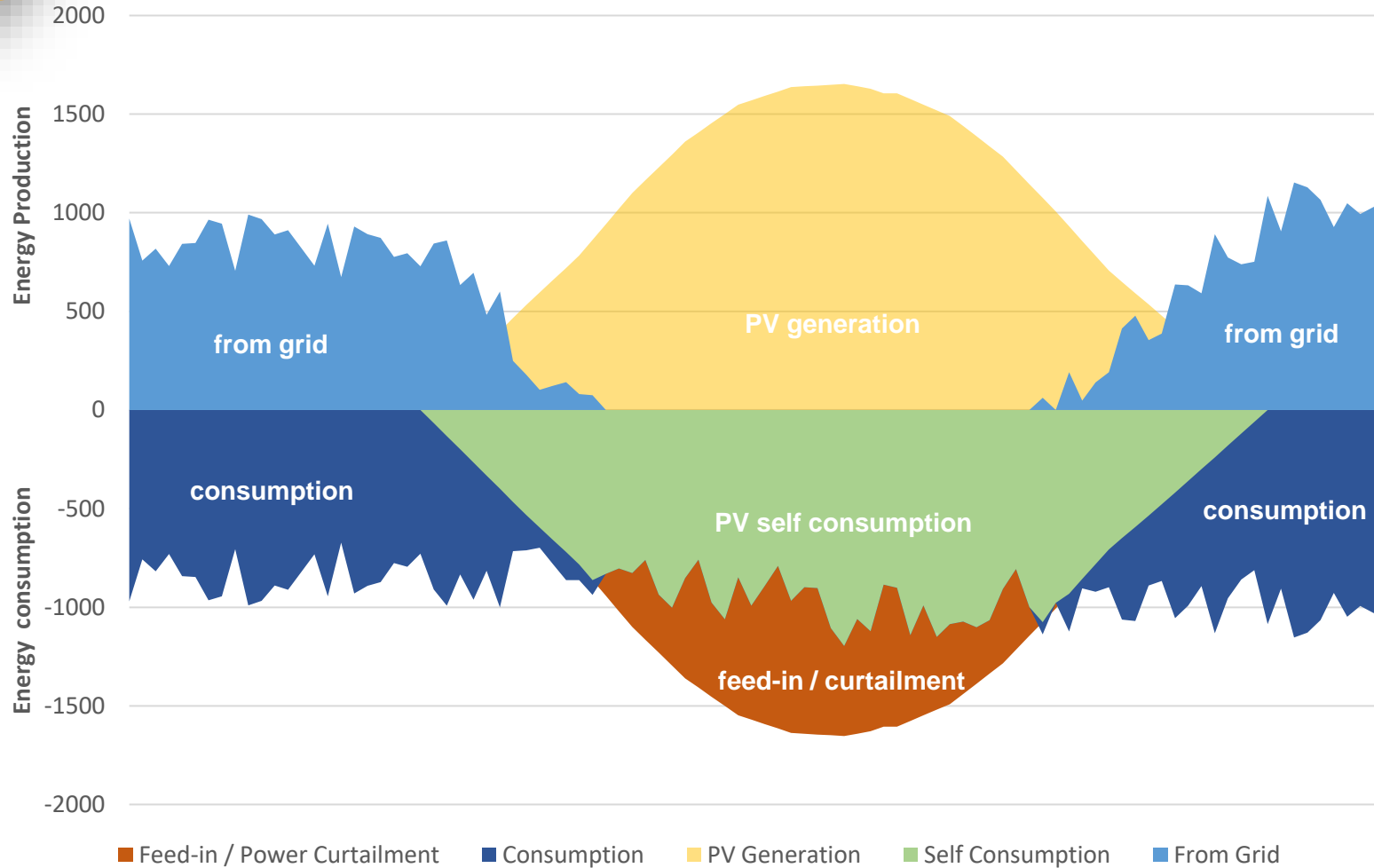


# Power Limitation and Zero Export With SOFAR Inverters

March 2021

- Introduction
- System Setup
- Configuration
- Accessories

# PV Self Consumption

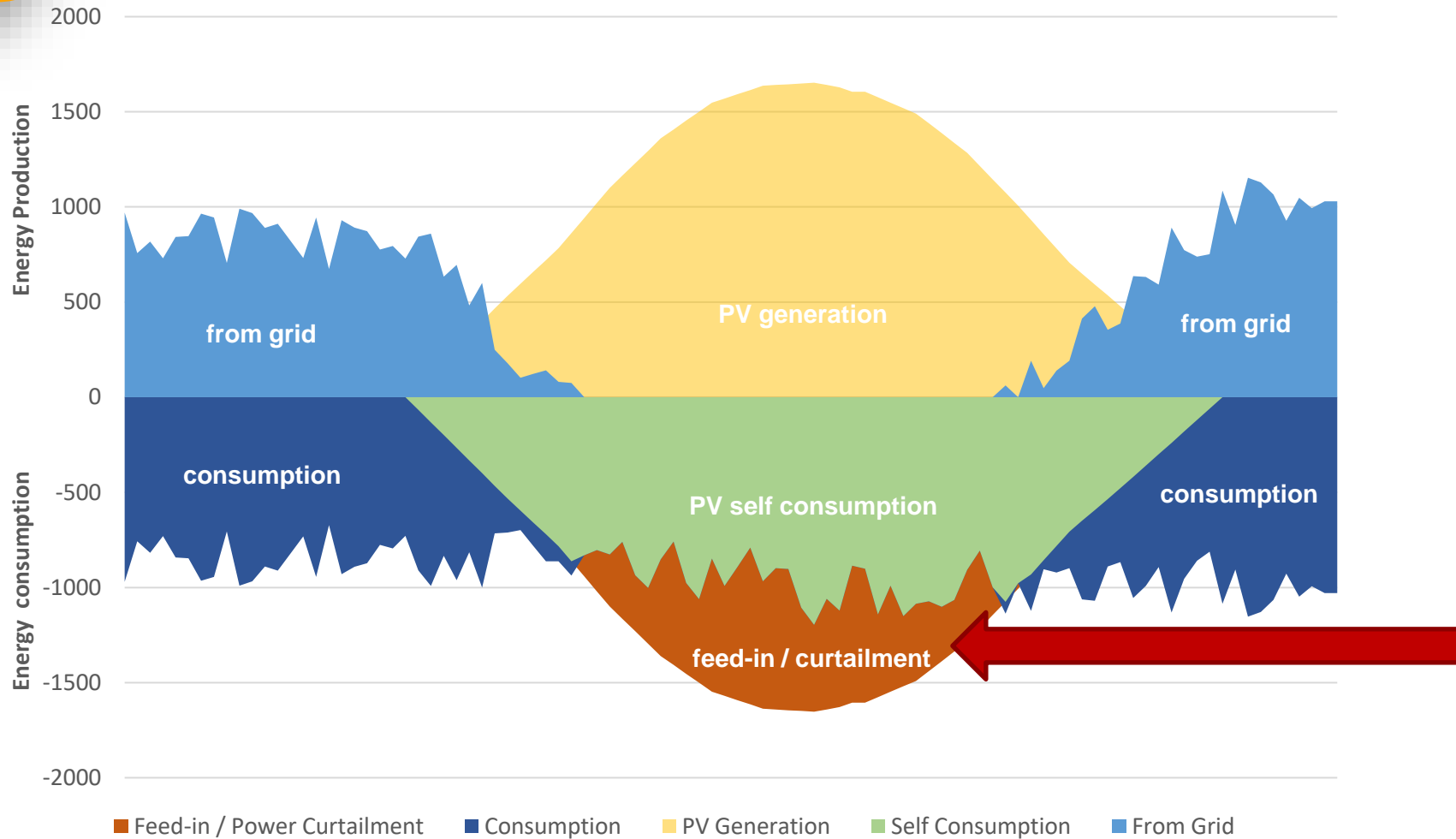


Where does energy come from?



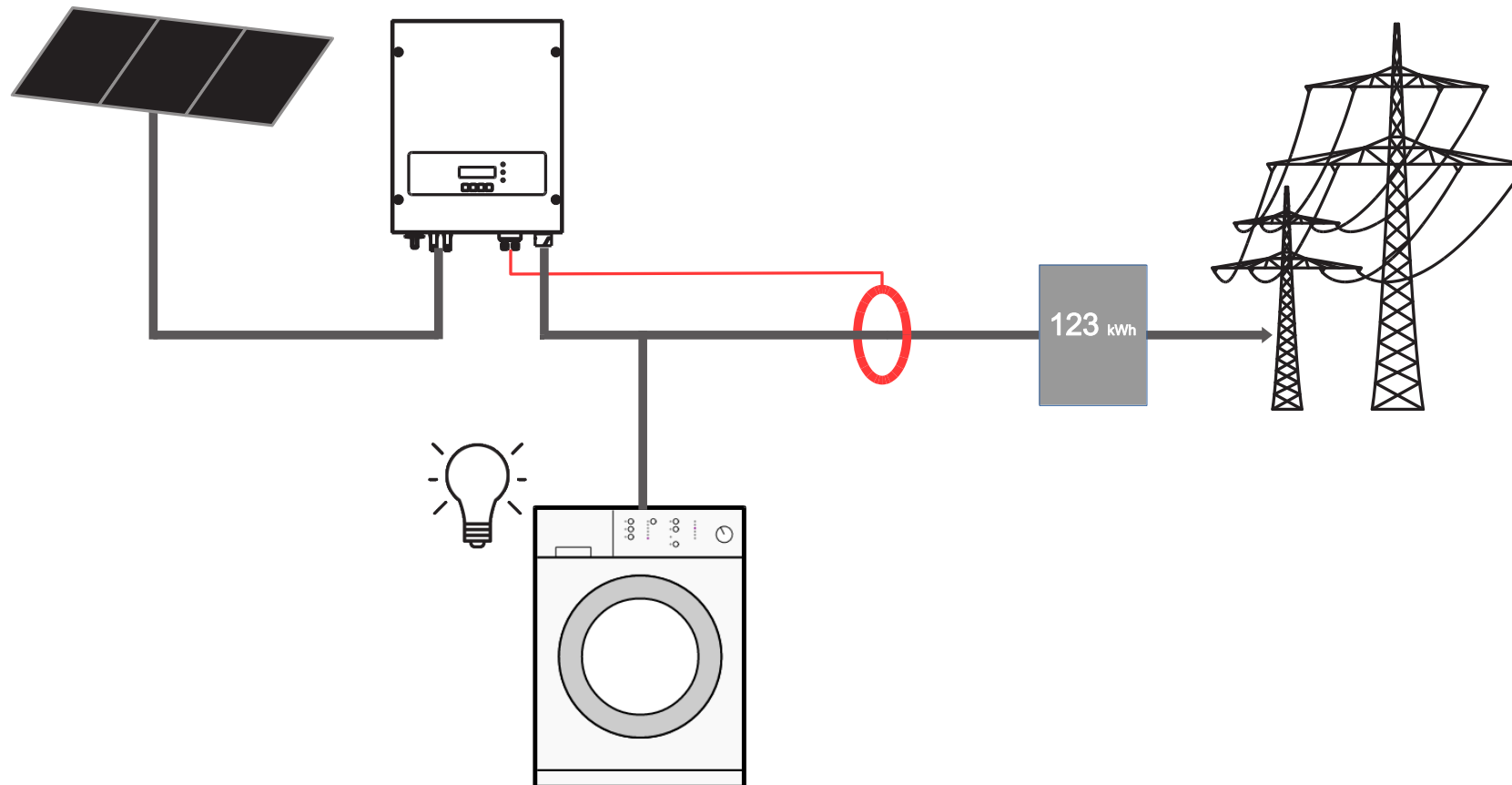
Where does energy go to?

# PV Self Consumption



If feed-in is not allowed (Zero feed-in) or limited, the power need to be curtailed in the inverter by adjusting the MPP tracker

# System Setup – 1-phase inverter

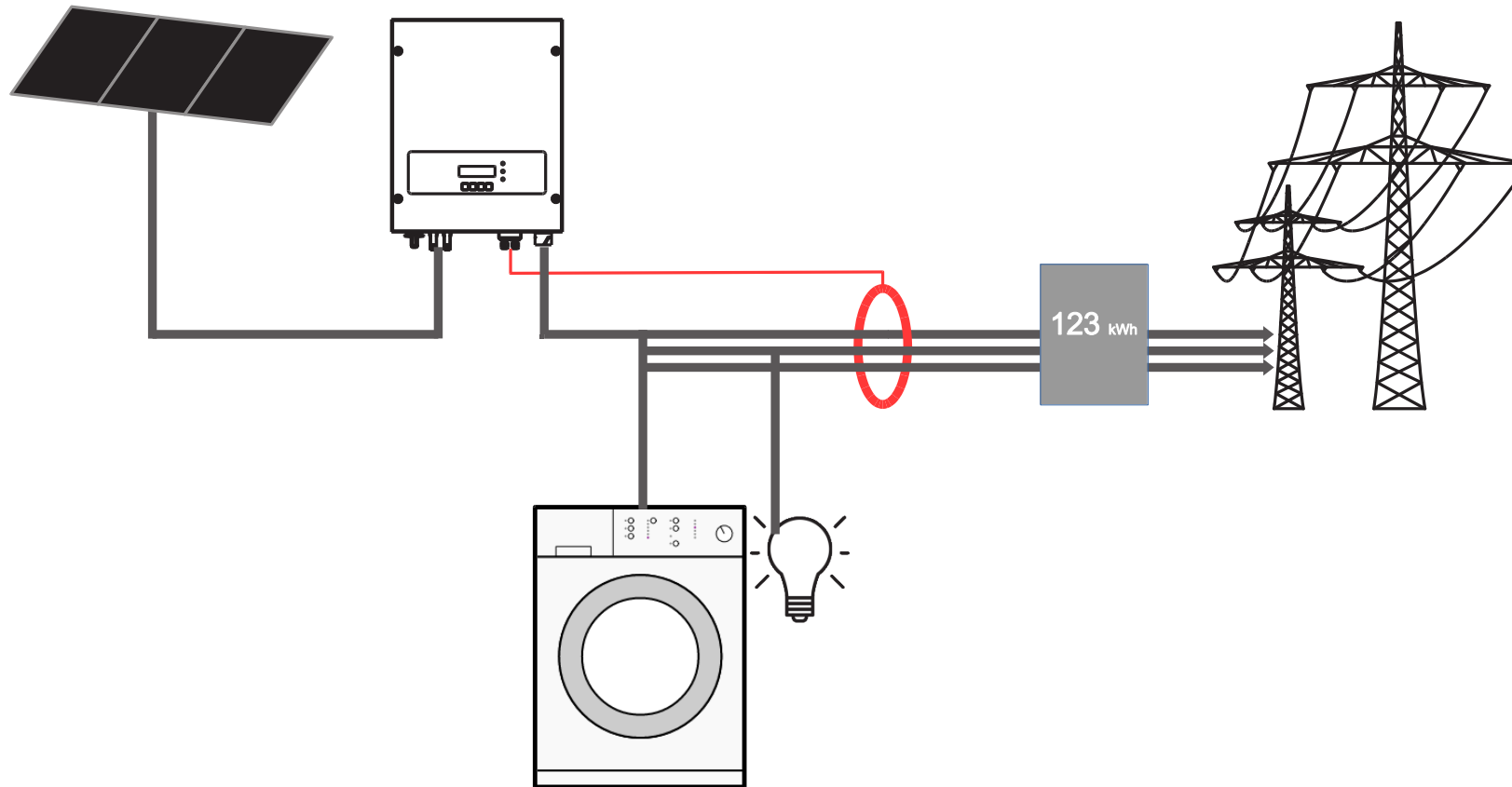


- Current transformer can be directly connected to the CT input
- CT max. current: 80 A
- CT Input max current: 25 mA
- CT ratio: 1:3000

## Supported products:

- SOFAR 1100 ... 3300TL-G3
- SOFAR 3000 ... 7500TL-G2
- HYD 3000 ... 6000-ES / -EP
- ME 3000-SP

# System Setup – 1-phase inverter / 3 phase grid

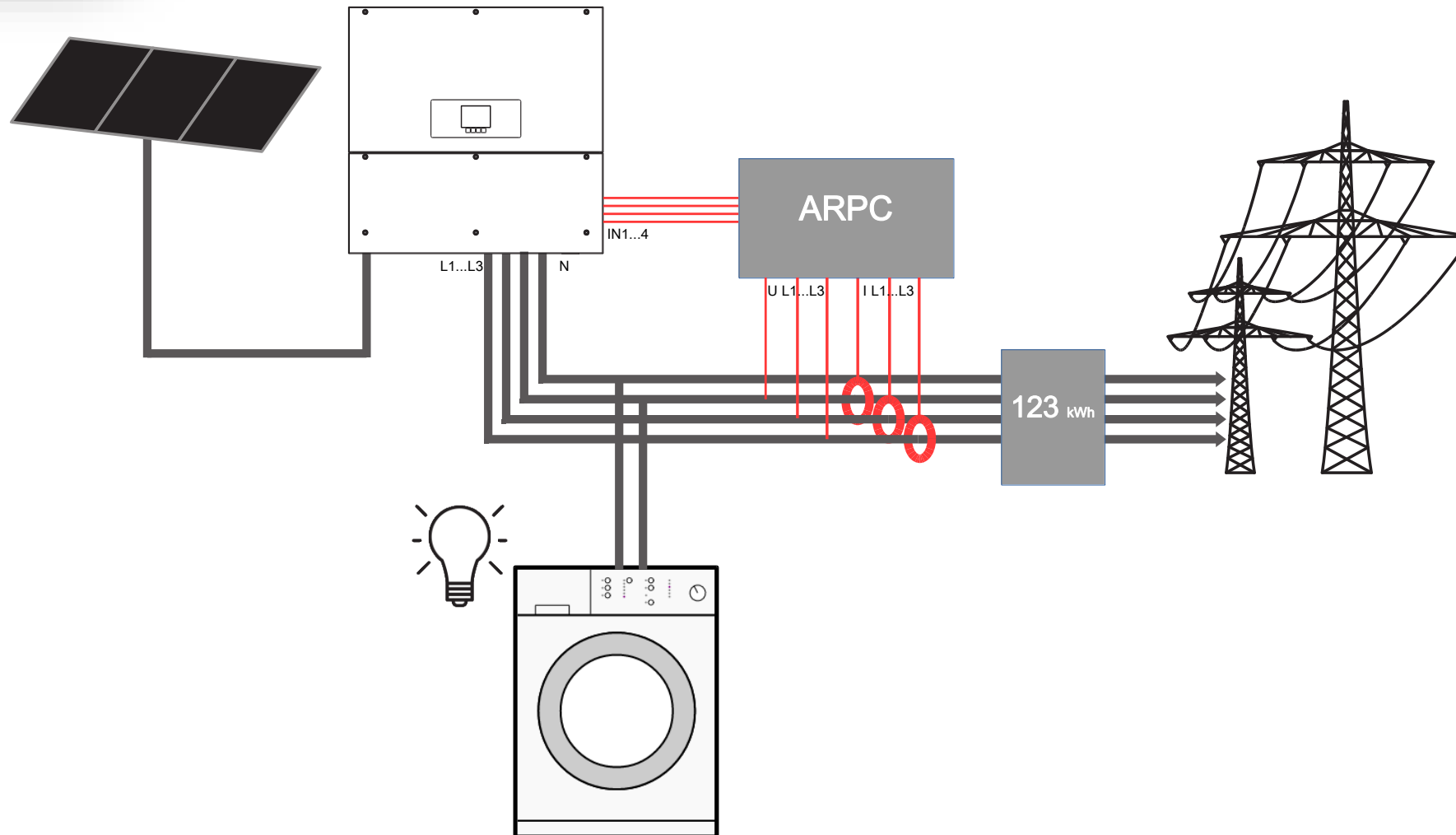


- 3 current transformers can be directly connected to the CT input
- CT max. current: 80 A
- CT Input max current: 25 mA
- CT ratio: 1:3000

## Supported products:

- ME 3000-SP

# System Setup – 3-phase inverter

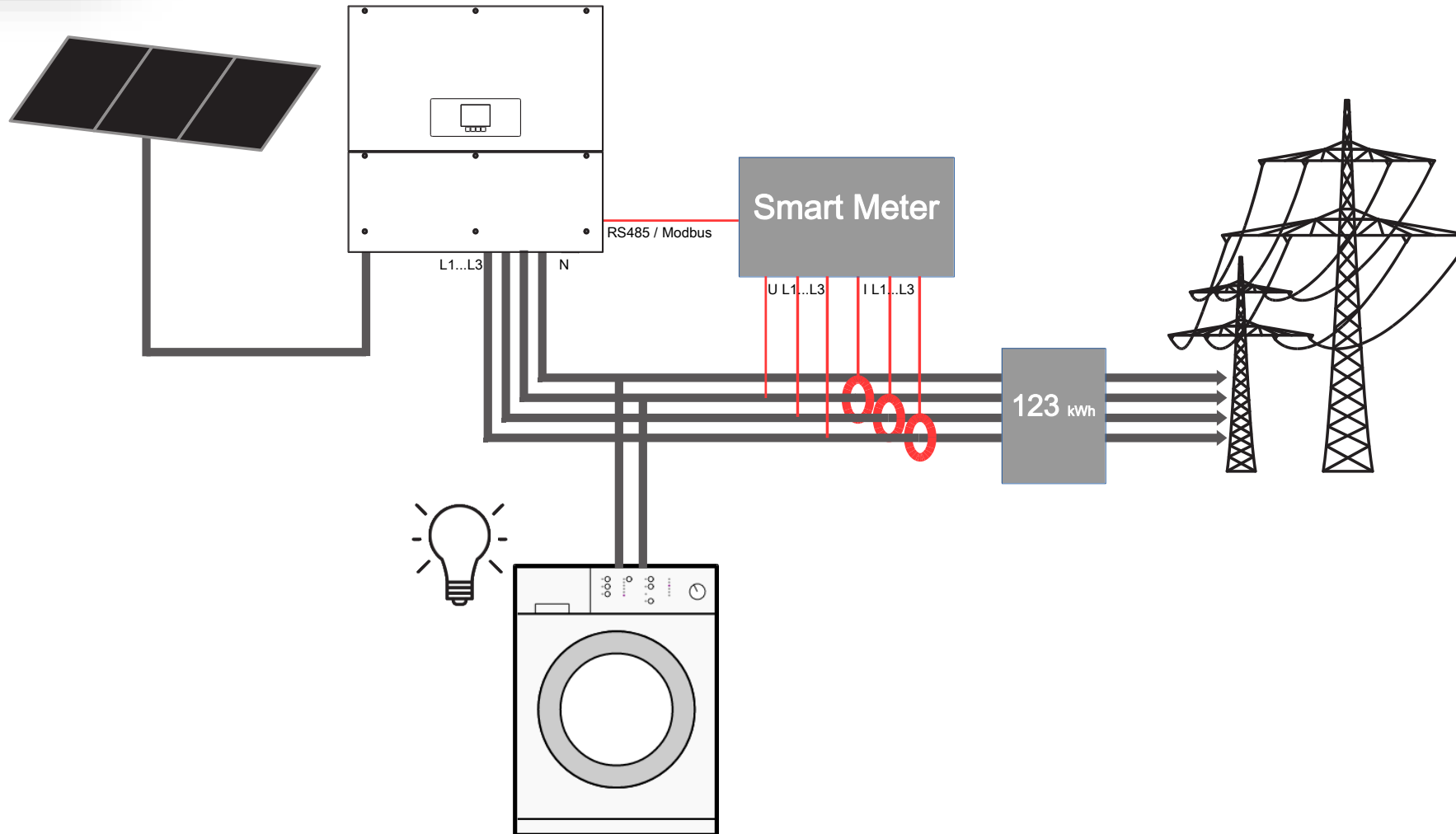


- 3 Current transformers and voltage measurement can be connected to the ARPC unit
- CT rating: 200mA / 1:3000
- ARPC is connected to the Inverter 4 Digital inputs I1 ... I4
- Power is limited in 16 steps (6,25% of nom. power)
- Can be configured with PC tool via RS485
- Activate by LCD screen (enable Reflux Power)

## Supported products:

- SOFAR 3.3 ... 12KTL-X
- SOFAR 20 ... 33KTL-G2
- SOFAR 50 ... 70KTL

# System Setup – 3-phase Hybrid / PV new generation



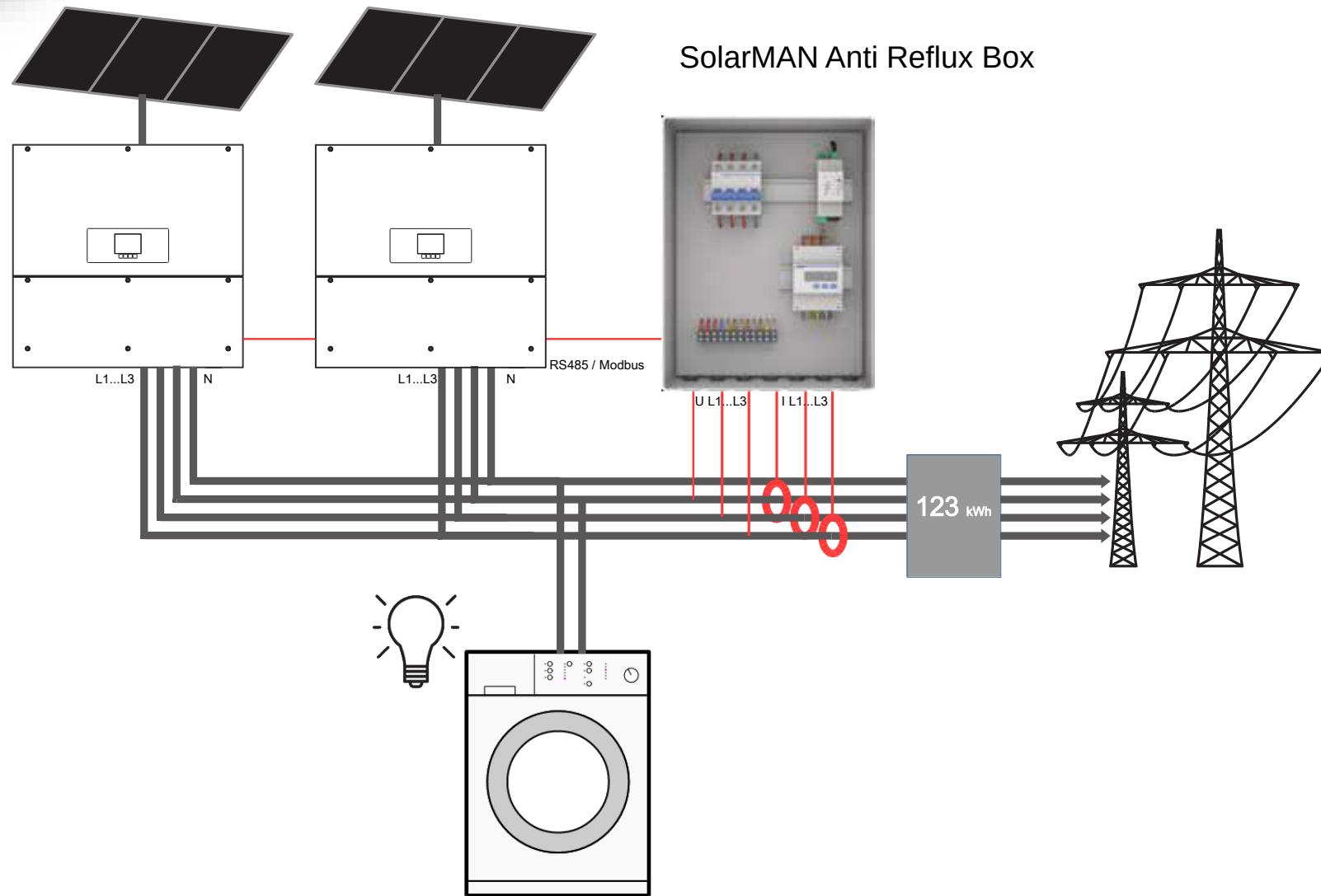
- 3 Current transformers and voltage measurement can be connected to the Smart Meter (supplied as accessory by SOFAR)
- Smart meter is connected to the Inverter to the RS485 input

## Supported Products:

- SOFAR 3.3K ... 24 KTLX-G3
- SOFAR 75KTL ... 136KTL
- SOFAR 255KTL-HV
- HYD 3000 ... 6000-EP / -ES
- HYD 5K ... 20KTL-3PH



# System Setup – 3-phase multiple inverters



- 3 Current transformers and voltage measurement can be connected to the Smart Meter (supplied as accessory by SOFAR)
- Smart meter is connected to the Inverter to the RS485 input
- Product: SAR-100 from IGEN

## Supported Products:

- SOFAR 1K ... 70KTL

# Configuration



1-phase inverter (CT input)

Zero-feedin: enter LCD Settings – Reflux Power – Enable

Power limit: enter LCD Settings – Power Limit – set  
Power limit in % of nominal power

3-phase inverter (ARPC)

Zero-Feedin: enter LCD Settings – Reflux Power –  
Enable

Power limit: enter LCD Settings – Power Limit – set  
Power limit in % of nominal power

3-phase hybrid & new Gen (Smart Meter)

see manual

Solarman Anti Reflux Box (SAR-100)

no configuration needed on inverter

# Accessories

Product	Recommended End-customer price
CT Kit 	32 €
ARPC (Anti Reverse Power Controller) 	203 €
Smart Meter Chint 	180 €
SolarMAN Zero Feedin controller (SAR-100) 	On request