

LARGE SCALE UTILITY PV SOLUTION



GoodWe-NA Product-20211211-ENV1.0. Information may be subject to change without notice during product improving.



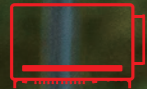
We, the Smart Energy Innovator

Copyright © GoodWe Technologies Co., Ltd. 2021. All rights reserved.

Disclaimer

The technical data above mentioned may be modified in order to reflect continuous technical innovation and improvements achieved by GoodWe's R & D team. GoodWe has the sole right to make such modification at any time without further notice. GoodWe's customers have the right to request the latest version of GoodWe product datasheets and any commercial contracts that may be signed will be based on the most recent version of the datasheet at the moment of signing the contract.

POWERFUL



POWERFUL INTELLIGENT & SAFE

INTELLIGENT&SAFE

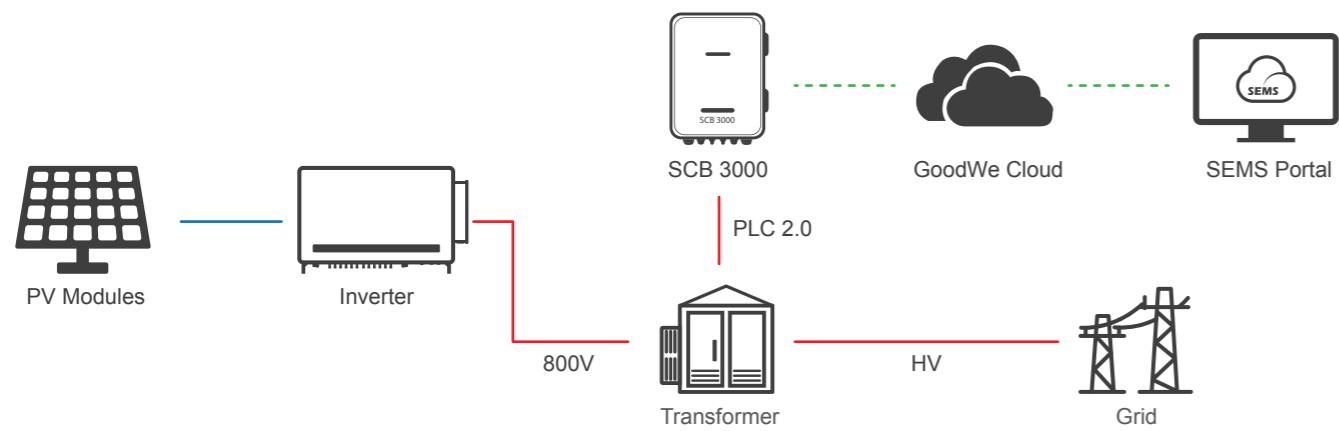
- 15A** Max. Current per string up to 15A
- Quick Setup via Bluetooth
- PLC 2.0** PLC 2.0
- Smart AFCI 2.0
- SVG** SVG Function
- Fault Record & Smart Diagnosis
- Internal Humidity Monitoring





Utility PV Solution

— DC Line — AC Line — Com Line



- ⊙ No loads consumption in this system, all solar power is fed into grid.
- ⊙ Specialized for ground mounted, utility-scale projects.
- ⊙ **Suggested Product: HT (1500Vdc) – 250kW**

Project Information

Project Location: Munich / Germany

PV Panel: 530 Wp Bifacial

Inverter: GW250K-HT GoodWe three phase commercial inverter (800V Output)

Installed DC Capacity: 40560 pcs x 0.53 kWp = 21500 kWp

Installed Rated AC Capacity: 65 pcs x 250 kW = 16250 kW

DC/AC Ratio: 1.32

*GoodWe HT series inverter has up to 50% DC oversize ability. In that project 32% DC oversize applied considering the strong level of irradiation of Germany.

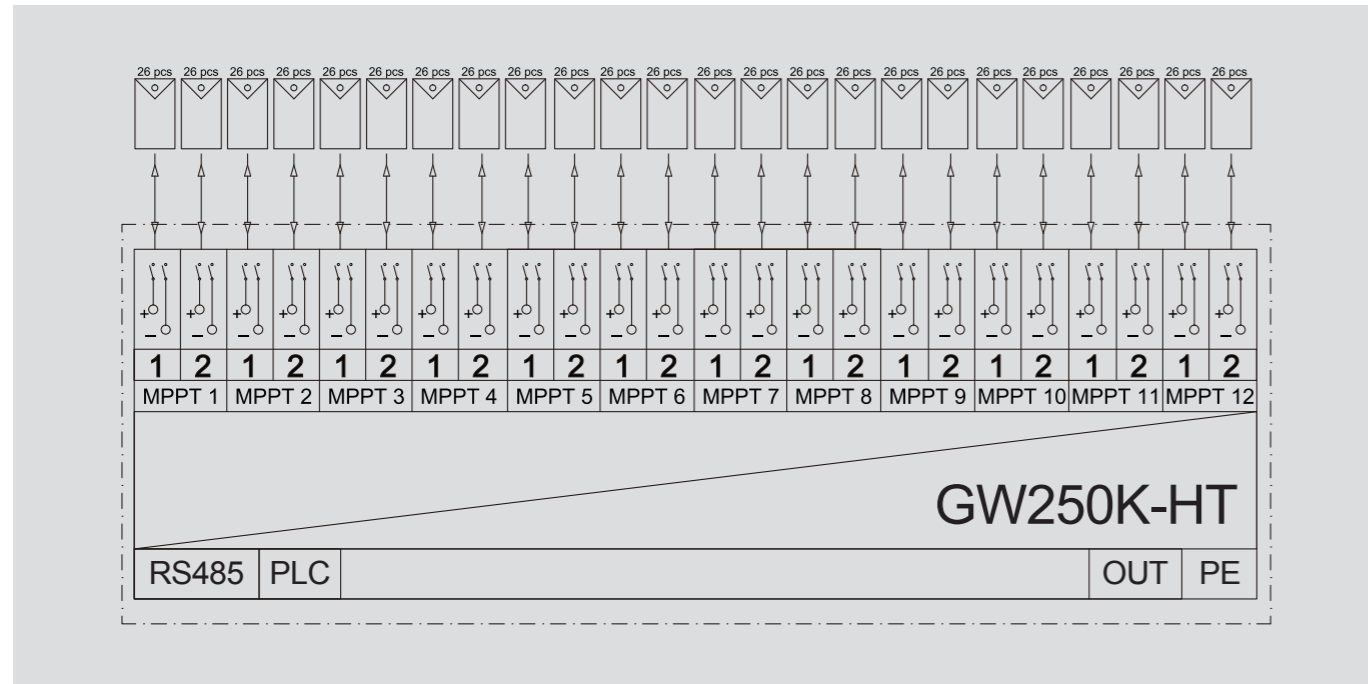
Main Components

No.	Material	Description	Quantity
1	PV Panel	530 Wp Bifacial	40,560
2	Inverter	GoodWe GW250K-MT	65
3	Construction Material	Supporting System, preferably aluminum	1 Package
4	DC Cable	1x4 mm ²	220,000 mt.
5	AC Cable	4x70 mm ²	600,000 mt.
6	HV Building	Transformer, AC Main Board, Protection cells	5
7	SCB3000	PLC Communication	5

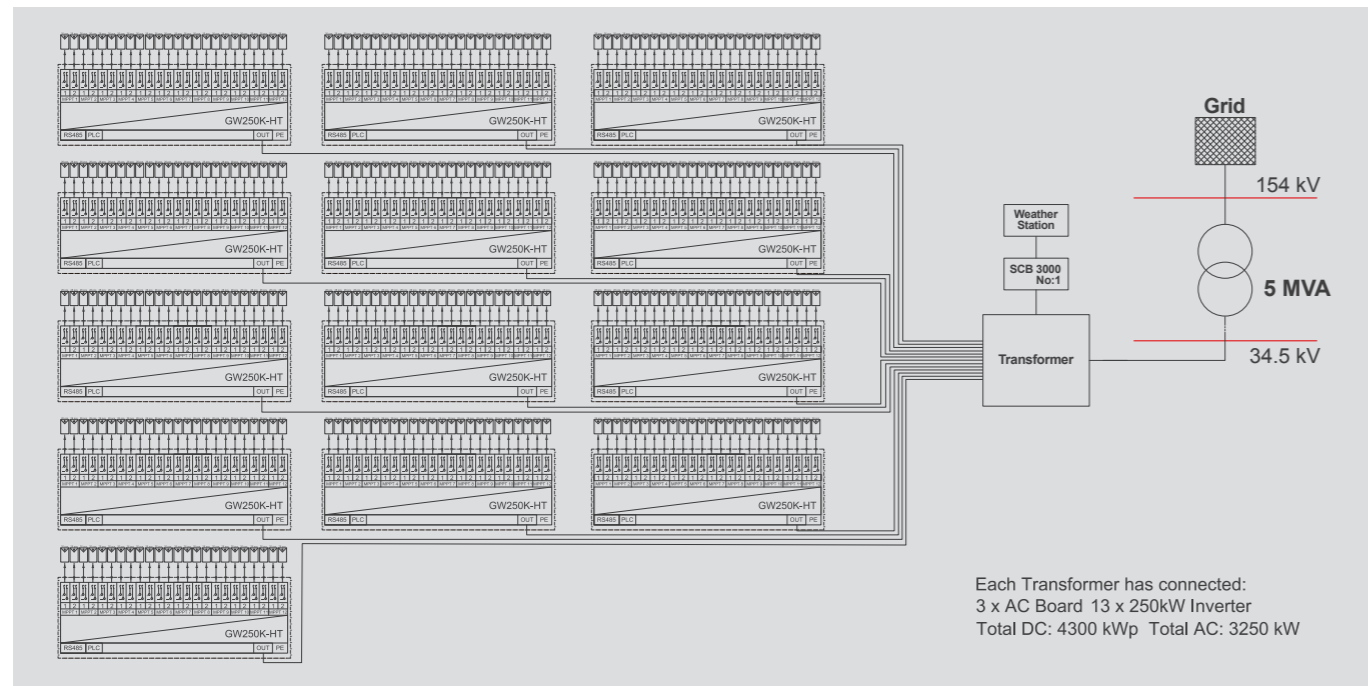
PV Panel Main Features

Maximum Power (Pmax)	530 Wp
Maximum Power Voltage (Vmp)	42 V
Maximum Power Current (Imp)	12.62 A
Open-circuit Voltage (Voc)	49.54 V
Dimensions & Weight	2230×1134×35mm 28.79 kg

Scheme For Cabling and Connections



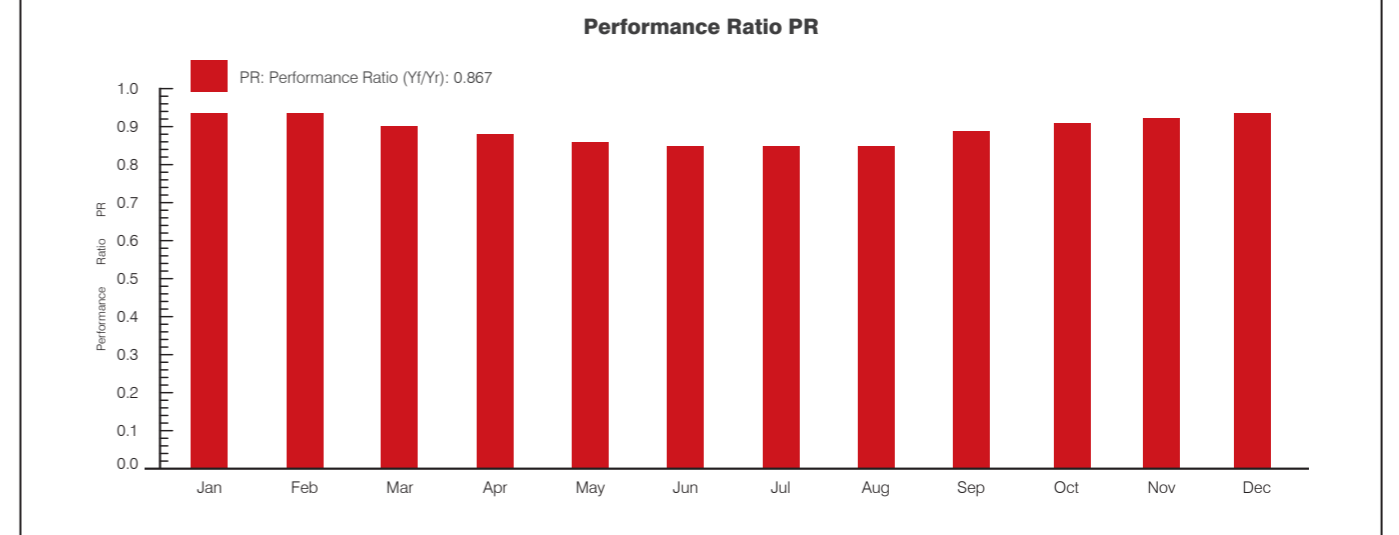
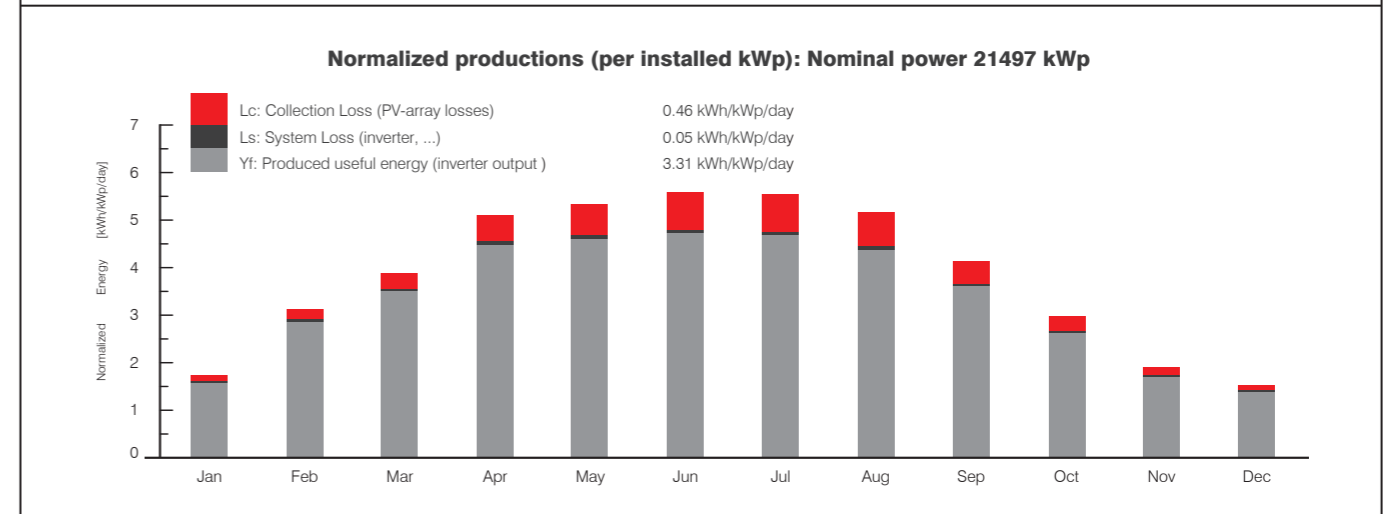
*Illustration of connection diagram. Each string has 26 PV Panels. Totally 24 string x 26 = 624 pcs. DC input power 330 kWp. DC/AC ratio is 1.32.
 *There are Ezlogger Pro and PLC board located inside of SCB3000. This communication box can support up to 60 inverters. For using more than 60 inverters, we can connect all SCB3000 boxes with Optical Fibre.



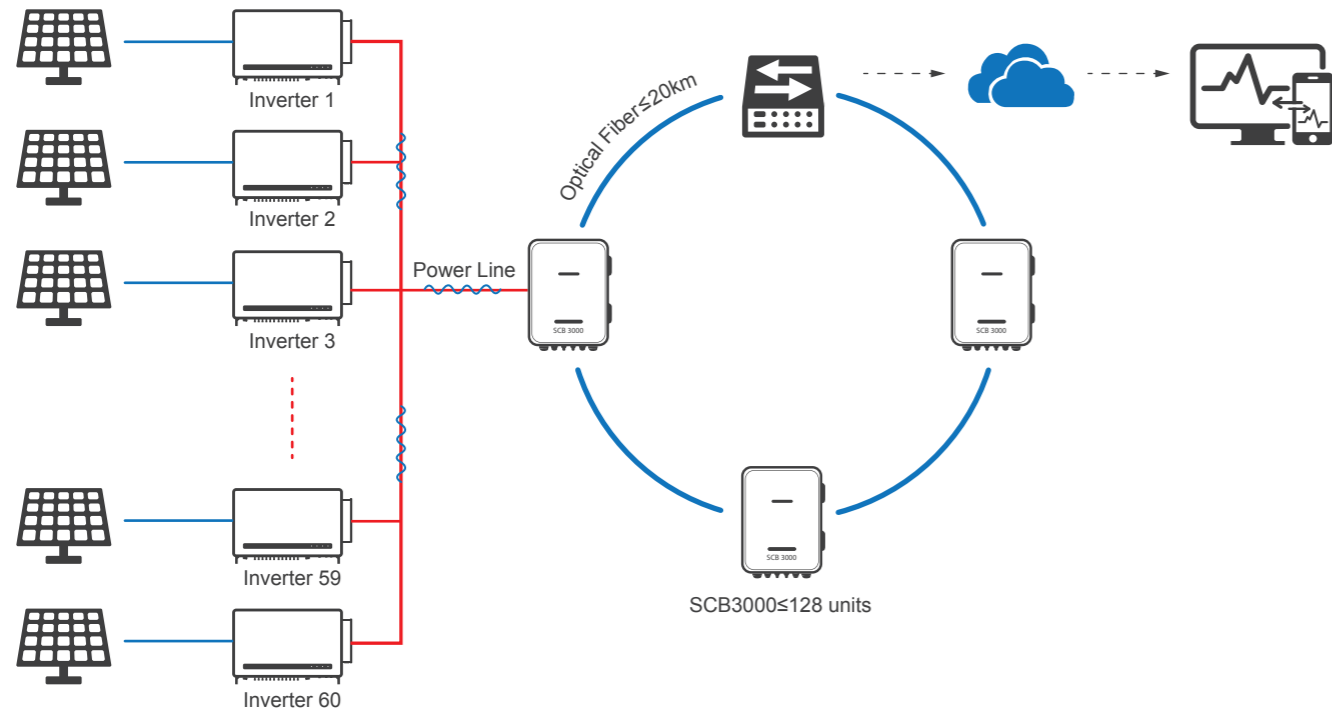
*Each transformer has 13 pcs connected inverters. Inverters are directly connected to the transformer to get a better LCOE. There are 5 groups of transformers.

PVsyst Efficiency Report

Grid-Connected System: Main results			
Project :	20MW Project		
Simulation Variant :	New simulation variant		
Main System Parameters	System Type	No 3D Scene Defined, No Shadings	
PV Field Orientation	Tilt	37°	Azimuth 0°
PV Modules	Model	JKM530M-7TL4-TV	Pnom 530 Wp
PV Array	No. of Modules	40560	Pnom Total 21497 kWp
Inverter	Model	GW250K-HTH	Pnom 250 kW ac
Inverter Pack	No.of Units	65.0	Pnom Total 16250 kW ac
User's Needs	Unlimited Load (Grid)		
Main Simulation Results			
System Production	Produced Energy	25969 MWh/year	Specific Prod. 1208 kWh/kWp/year
	Performance Ratio PR	86.71 %	

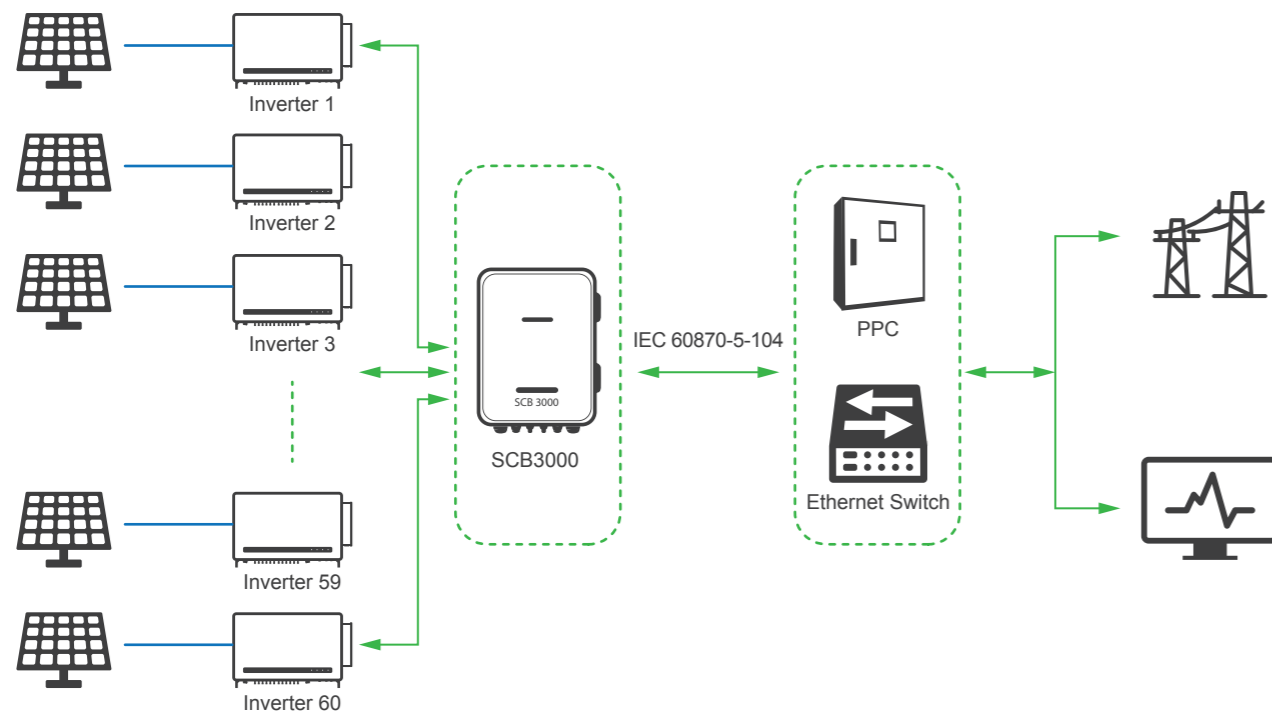


PLC Optical Fiber Ring Network



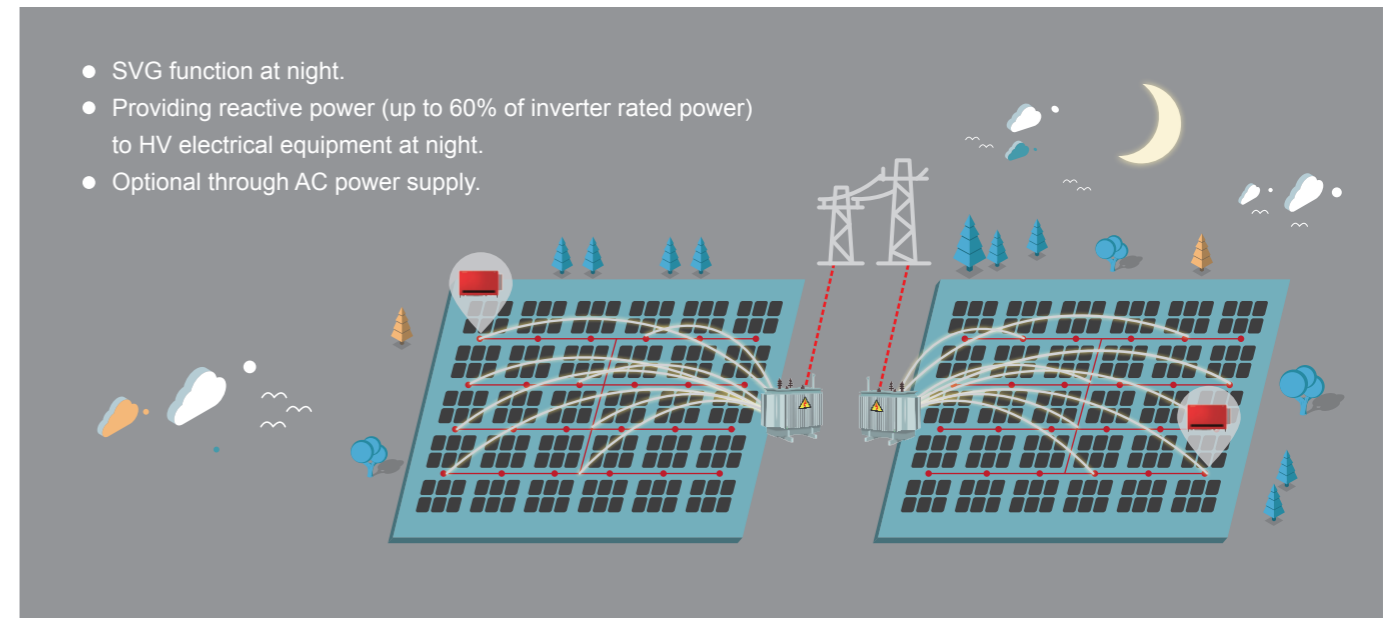
- PLC optical fiber ring network – Max. communication distance is **20km**.
- Strong anti-interference capability.
- PLC optical fiber ring network communication is fit for ground mounted and utility-scale projects without loads.

Support SCADA System

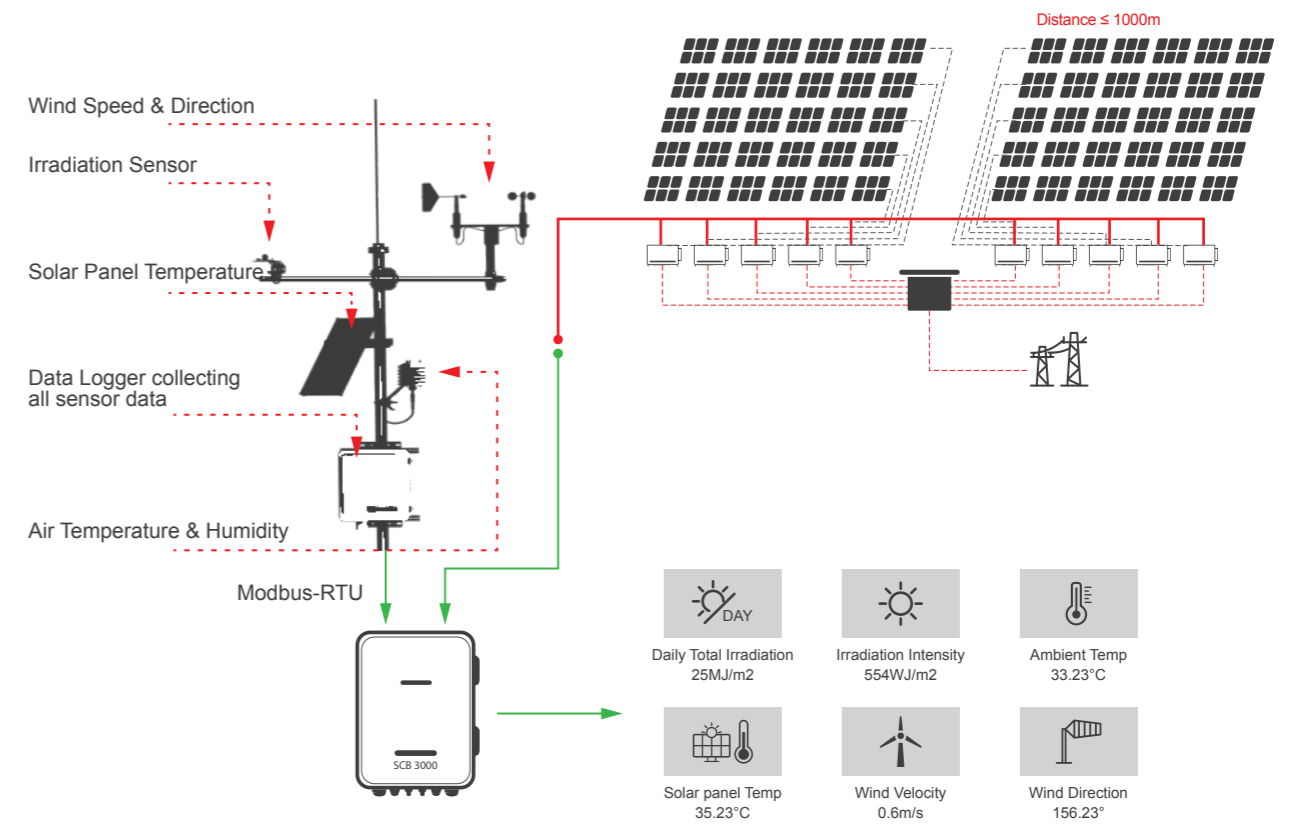


*GoodWe Monitoring devices integrated IEC 60870-5-104 protocol to communicate with SCADA system.

SVG supply at night by HT inverters to avoid PF penalties



Fully Compatible With Weather Station



- The weather station can be connected to COM4 of SCB3000.
- The weather station should have Modbus-RTU protocol.
- Please download "Promate" to setup the parameters.

HT 1500V Datasheet



GoodWe Projects Reference



5 MW 📍 Hungary

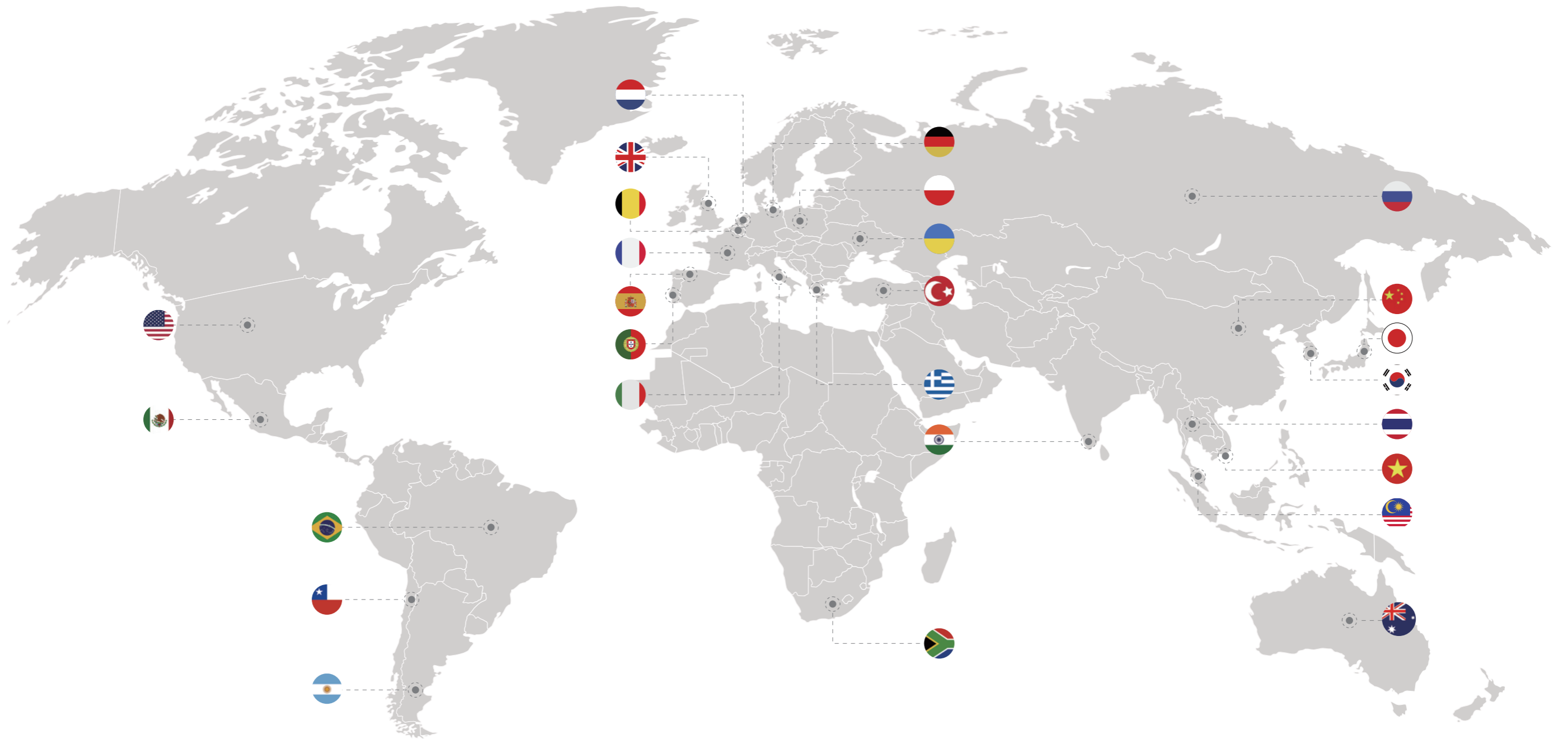


18 MW 📍 Konya Turkey



1 MW 📍 Kherson Ukraine





Global Presence

EMEA

Germany
Netherlands
Turkey
Poland
Russia

EMEA

UK
Italy
Portugal
Spain
France

EMEA

Ukraine
Belgium
South Africa
Greece

LATAM

USA
Mexico
Chile
Brazil
Argentina

APAC

China
India
Vietnam
Australia

APAC

Japan
South Korea
Thailand
Malaysia

*: Please visit GoodWe website for Contact information. www.goodwe.com