



CREATE A NEW ERA OF SMART ENERGY

Commercial & Industrial Portfolio - Commissioning & SEMS

COMMERCIAL & INDUSTRIAL SOLUTION 17-136 kW



HT

100-136kW / 10 to 12 MPPT



Up to 12 MPPT



Full Load Operation
at 50°C



Up to 15% AC Output
Overloading



Arc-Fault Circuit
Interrupter



Up to 50%
DC Oversizing



Power Line
Communication



MT (LV)

50-80kW / 4 MPPT



SMT (LV)

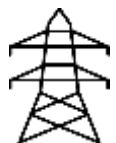
25-36kW / 3 MPPT



SDT

17-25kW / 2 MPPT

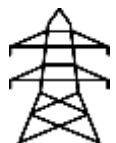
SDT G2 Series – benefits at a glance



Utility Export
Control

- **C&I** three phase inverters for commercial applications from 17 to 25 kW with 2 MPPTs
- **Light Weight** 25 kg
- **Wide PV Voltage Range:**
 - 200V-950V - **MPPT Range**
 - 1100V **max input**
- **High energy yields** thanks to:
 - efficiency up to 98,4%
 - AC overloading up to 10%
 - 50% DC overloading
- **Robust body** made of die-cast Aluminium
- **Reliable**, also under tough conditions, thanks to **IP65** rating and operating temperature range of **-30...60°C**

SMT Series – benefits at a glance



Utility Export Control

- **C&I** three phase inverters for commercial applications from 25 to 36 kW with 3 MPPTs
- **Light Weight** 40 kg
- **Wide PV Voltage Range:**
 - 200V-950V - **MPPT Range**
 - 1100V **max input**
- **High energy yields** thanks to:
 - efficiency up to 98,8%
 - AC overloading up to 10%
 - 50% DC overloading
- **Robust body** made of die-cast Aluminium
- **Reliable**, also under tough conditions, thanks to **IP65** rating and operating temperature range of **-30...60°C**

MT Series – benefits at a glance



Utility Export Control

- **C&I** three phase inverters for C&I applications from 50 to 80 kW with 4 MPPTs
- **Wide PV Voltage Range:**
 - 200V – 1000Vdc **MPPT Range**
 - 1100V **max input**
- **High energy yields** thanks to:
 - efficiency up to 98,8%
 - AC overloading up to 10%
 - 50% DC overloading
- **Optional: AFCI** Arc Fault Current Interrupter, Anti **PID** Function & **AC Terminal Temperature** Monitoring
- **Reliable**, also under tough conditions, thanks to IP65 rating and operating temperature range of -30...60°C
- **PLC** Power Line Communication available

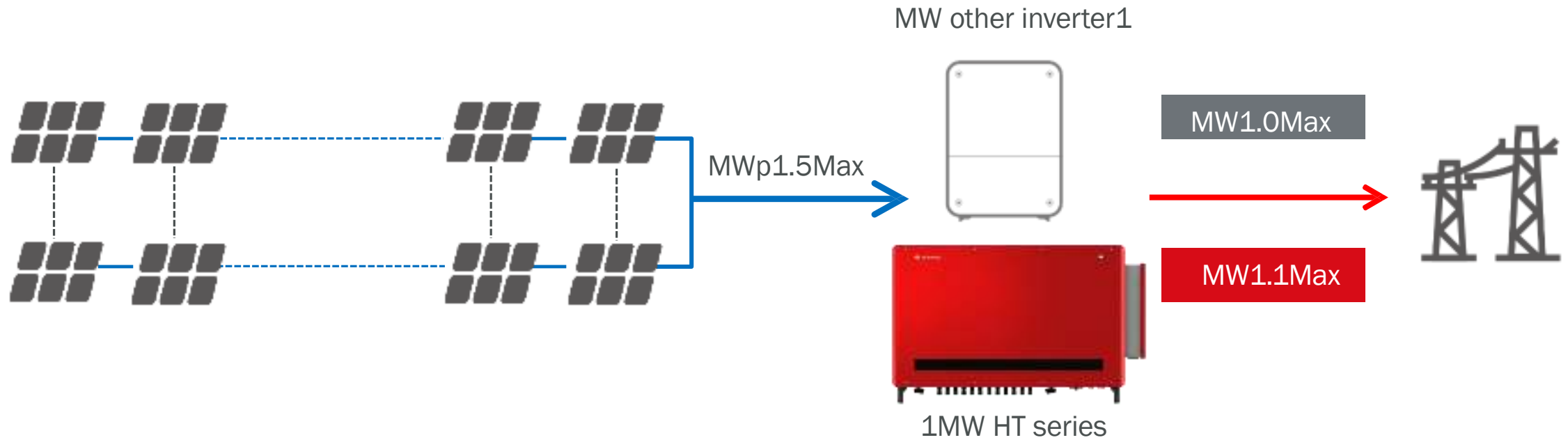
HT Series– benefits at a glance



Utility Export Control

- **Utility & C&I** three phase inverters for large C&I and Utility applications
from 100 to 120 kW with 10 to 12 MPPTs
- **Wide PV Voltage Range:**
 - 180V – 1000Vdc **MPPT Range**
 - 1100V **max input**
- **High energy yields** thanks to:
 - efficiency up to 98.6%
 - AC overloading up to 10%
 - 50% DC overloading
 - compatibility with BF modules
- **Low voltage (400 Vac)**
- **Fully Integrated SPD on the DC & AC & communication boards**
- **Optional: AFCI** Arc Fault Current Interrupter, Anti **PID** Function, **Humidity** Detection & **AC Terminal Temperature** Monitoring
- **Reliable**, also under tough conditions, thanks to **IP66** rating and operating temperature range of **-30...60°C**

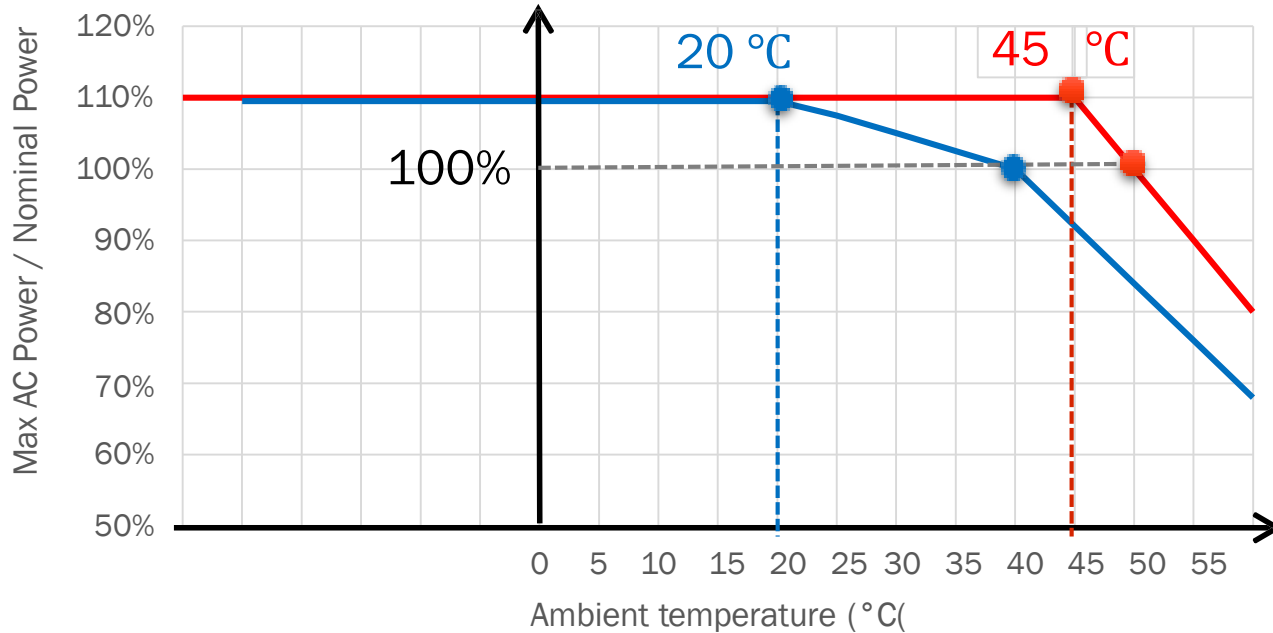
AC overloading to maximize power output



Up to **10% AC** overloading capability provides more AC output power, and thus increases the energy yield.

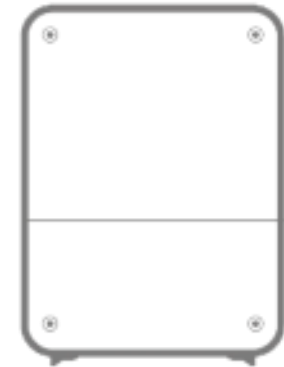
High Temperature Adaptability

Temperature derating curve



GoodWe HT series

VS.



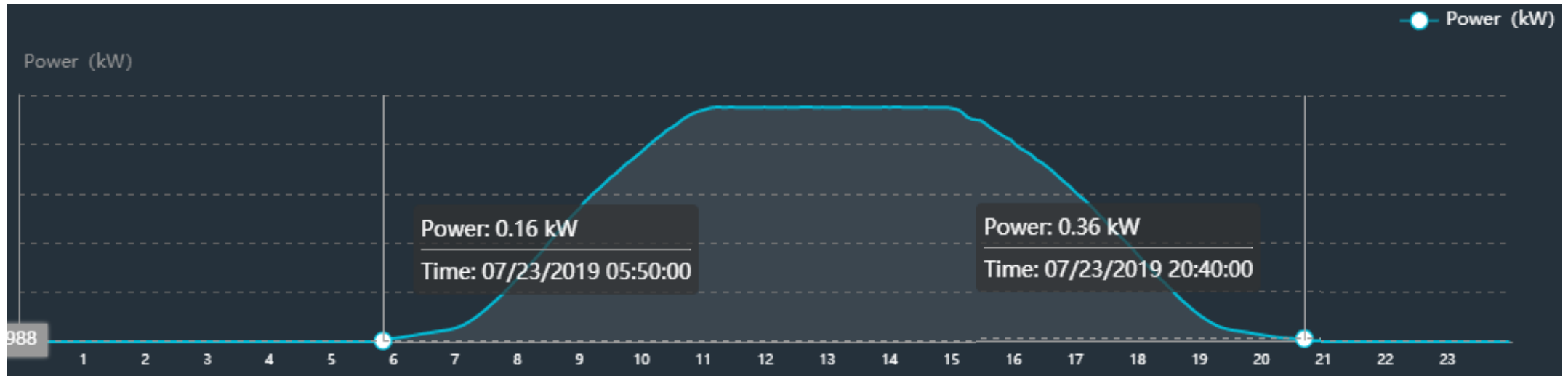
Other inverter



IP68 fan equipped on GoodWe HT series

Derating threshold value of **45°C of HT Series** contributes to higher yield in mild and hot areas.

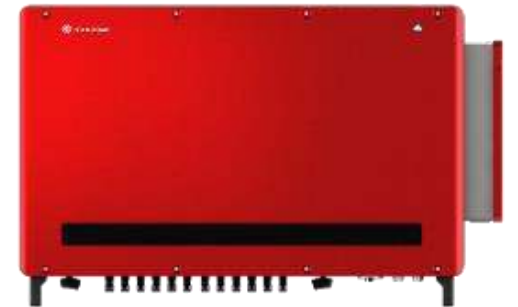
Long operation hours due to low starting voltage



Power Curve of a reference site installation

Starting voltage 200V

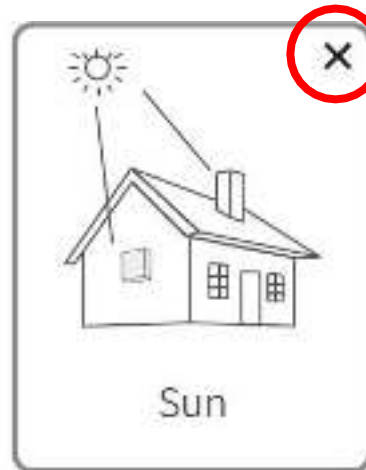
Wide MPPT range: 180 V – 1000 V



Inverter installation

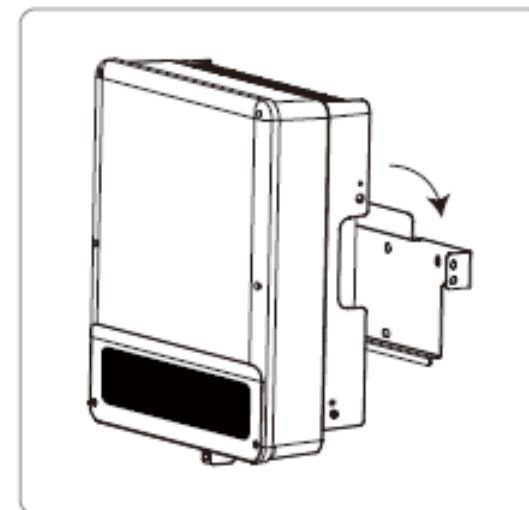
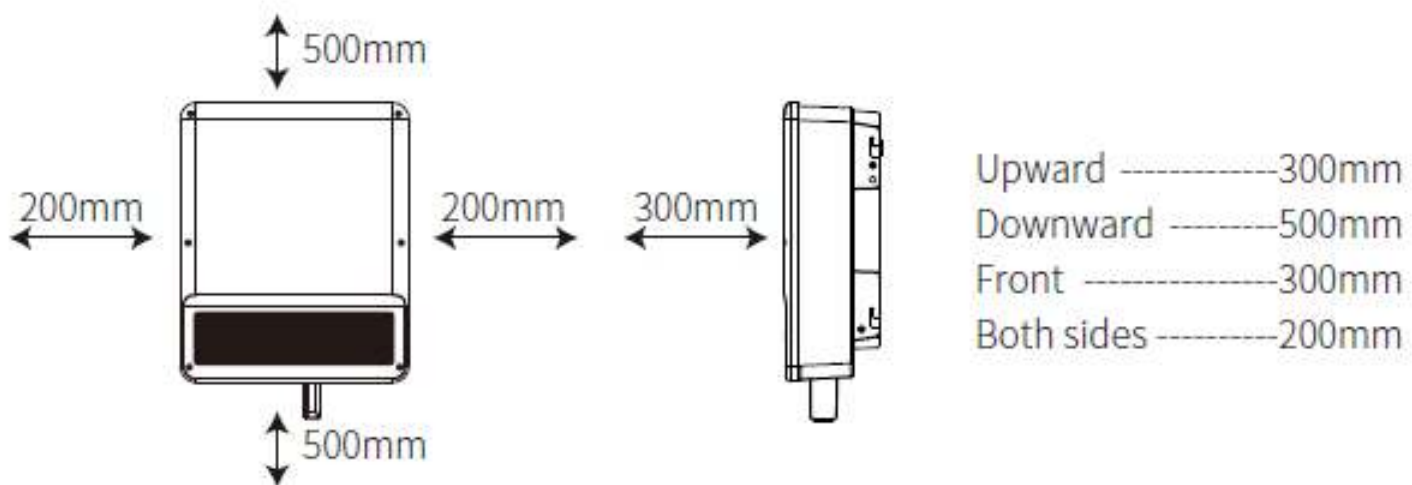
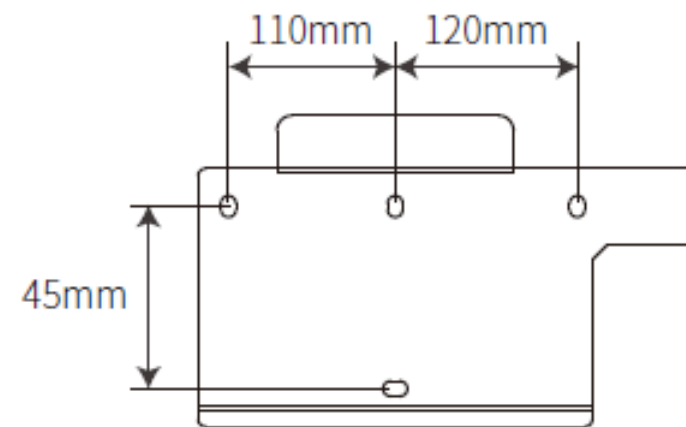
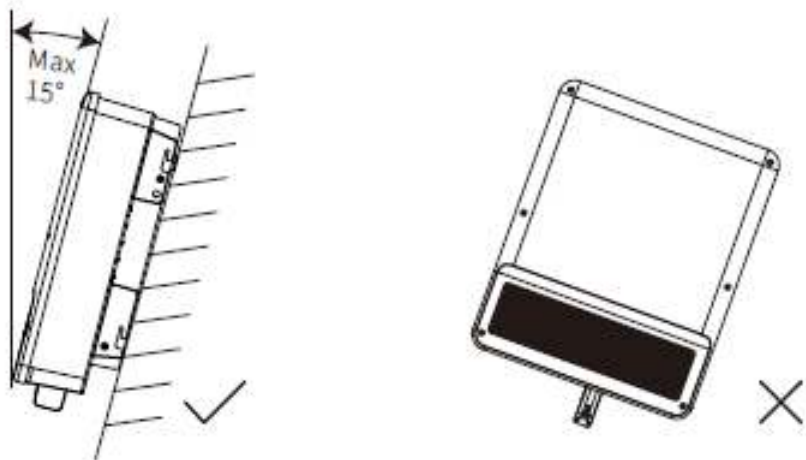
Recommended to avoid locations with direct exposure to:

- Sunlight
- Rain
- Snow



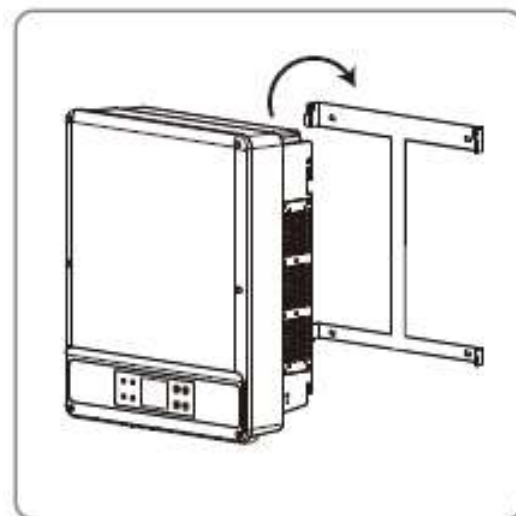
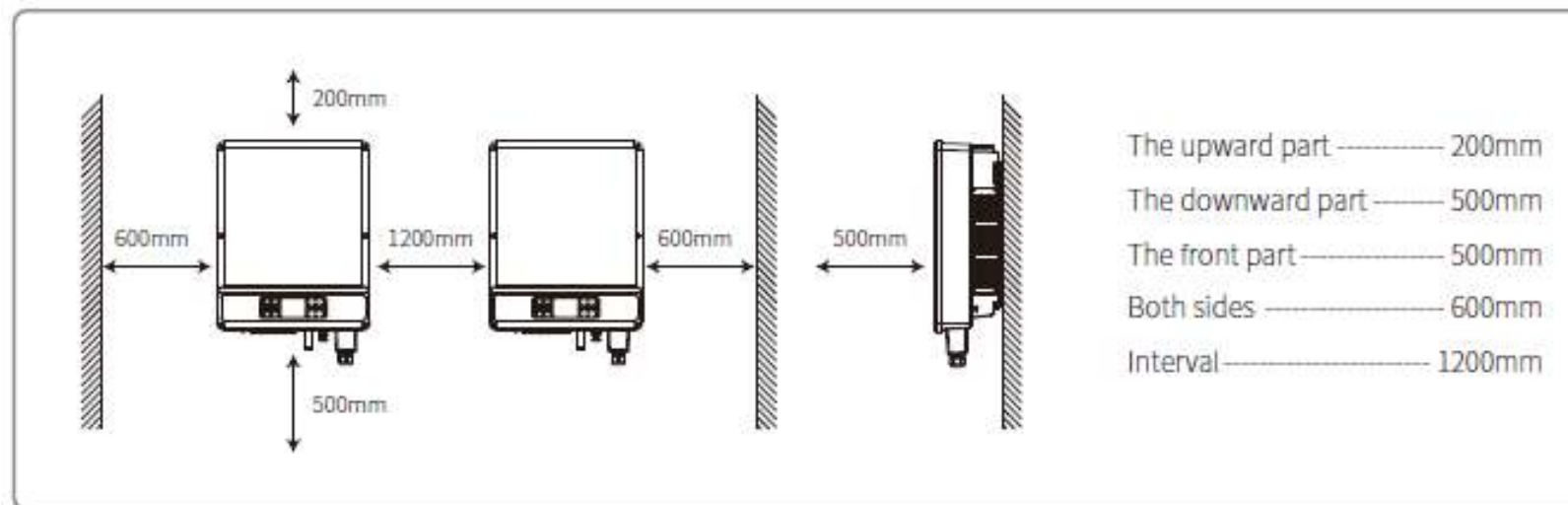
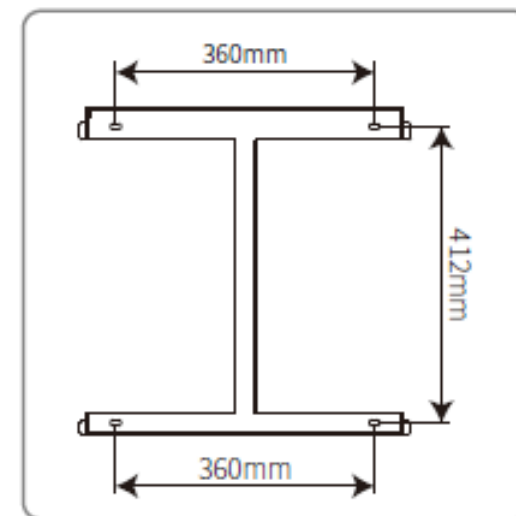
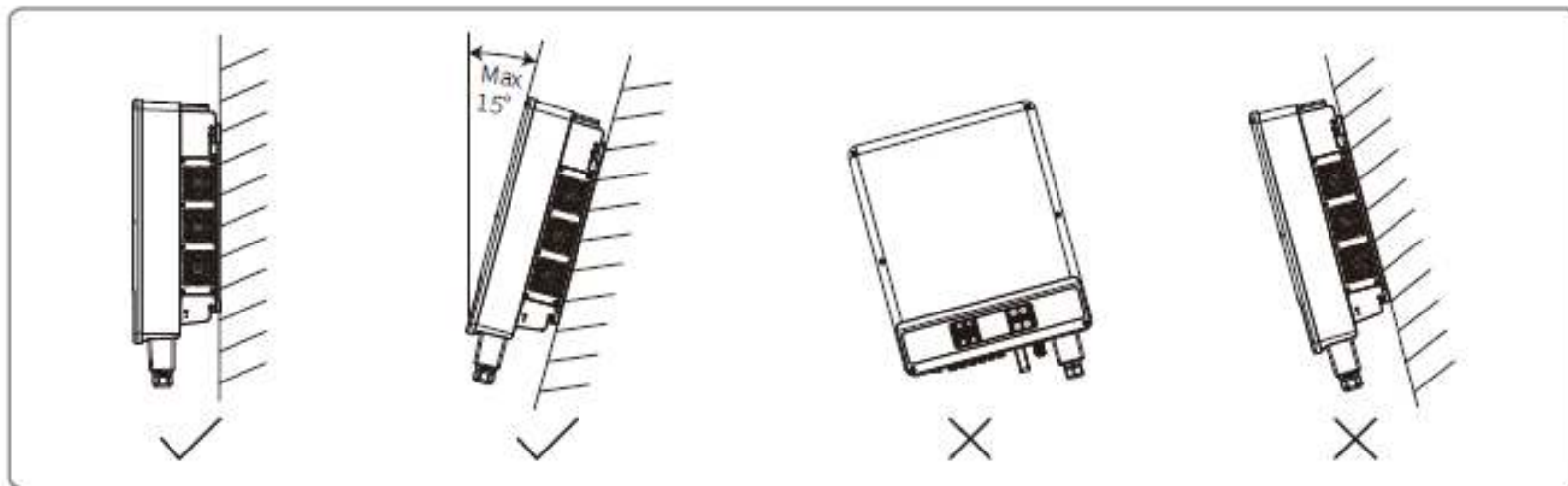
Inverter installation

SDT G2 Series Mounting



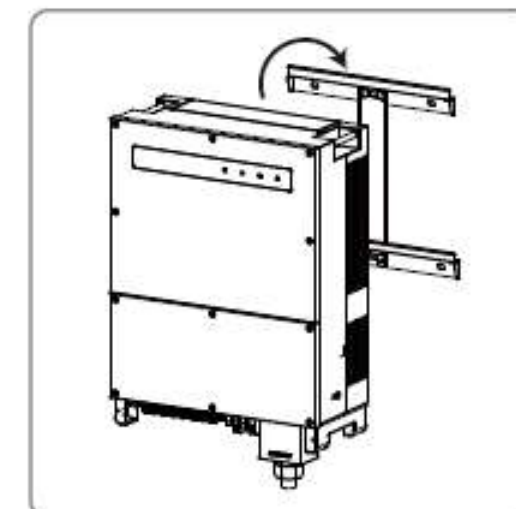
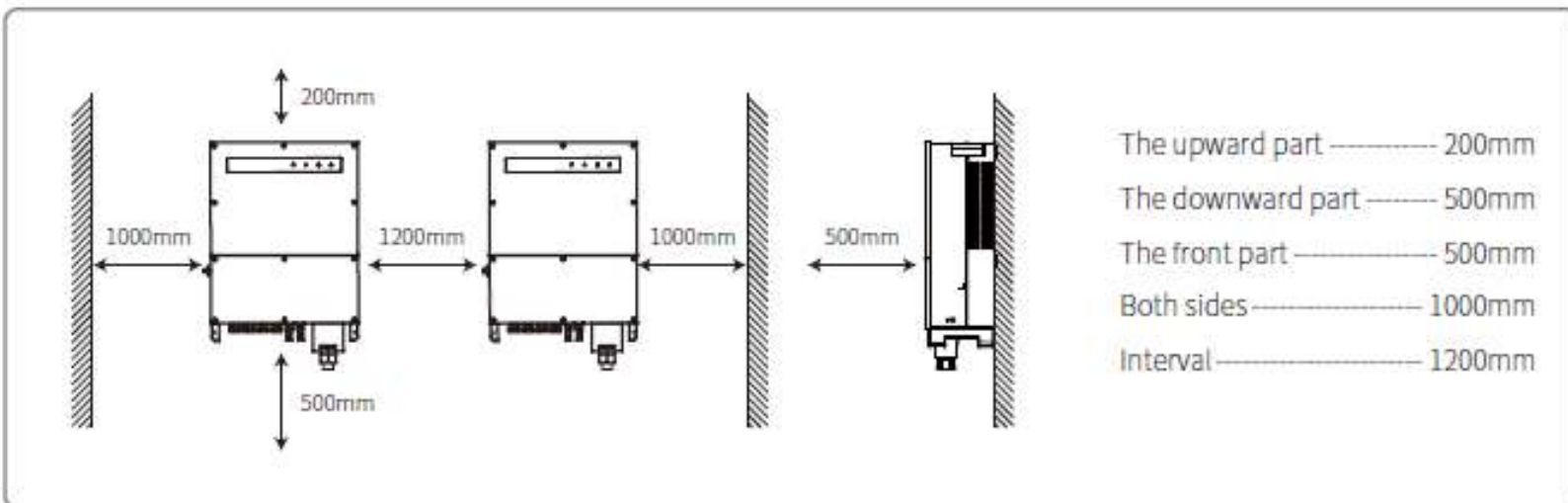
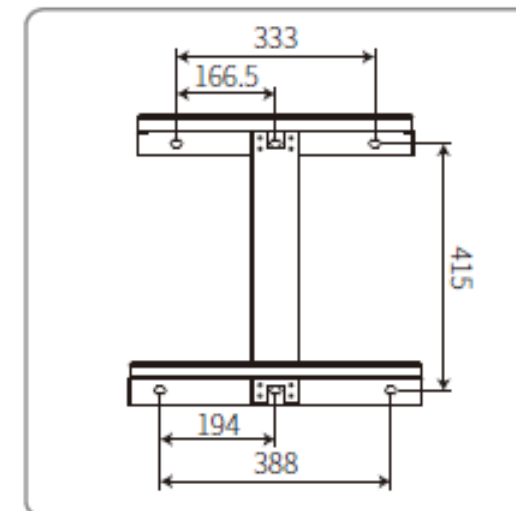
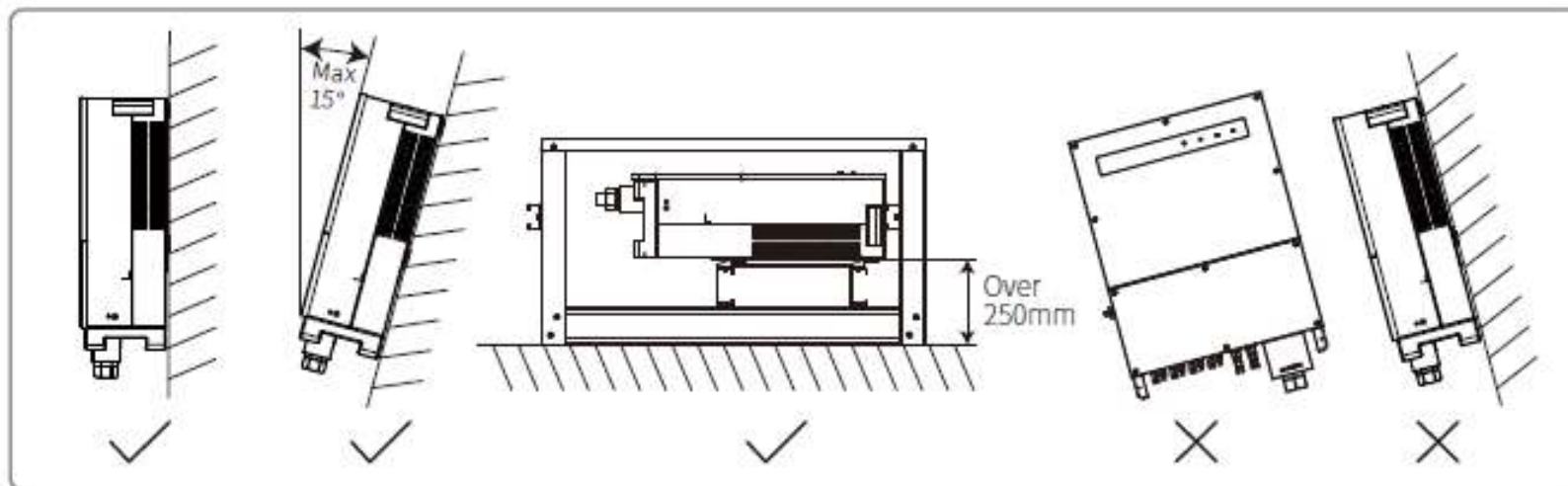
Inverter installation

SMT Series Mounting



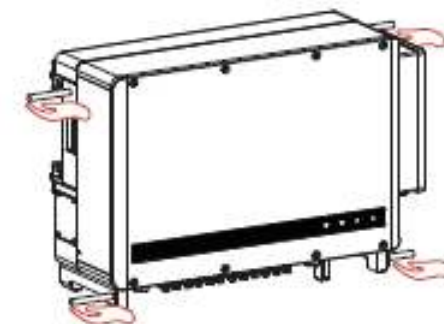
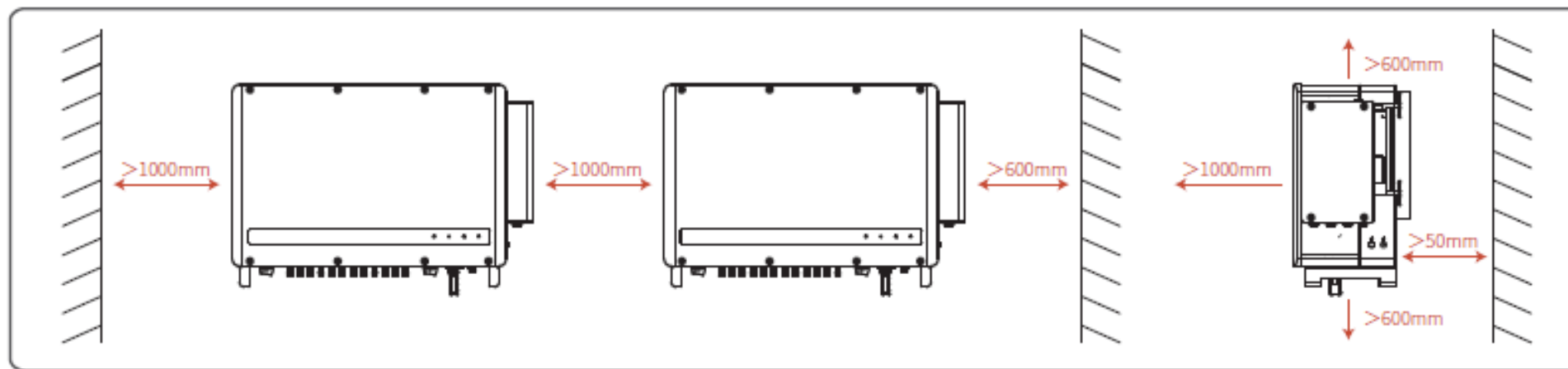
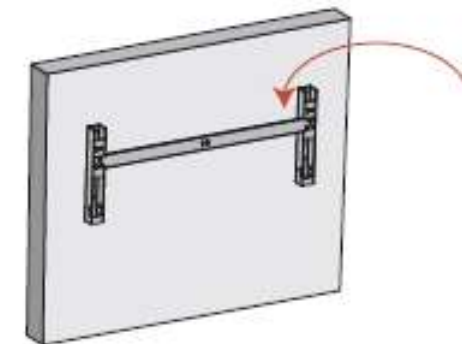
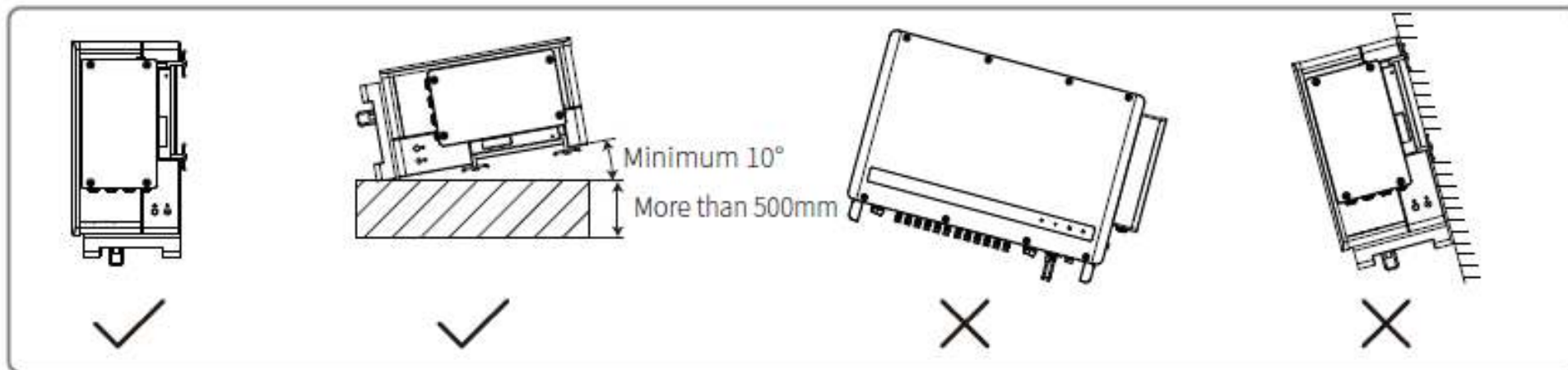
Inverter installation

MT Series Mounting



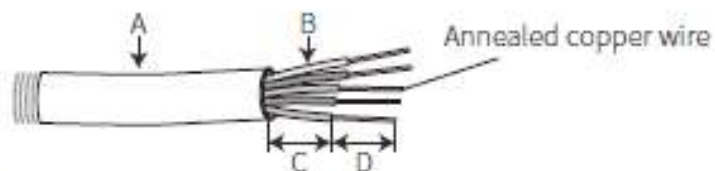
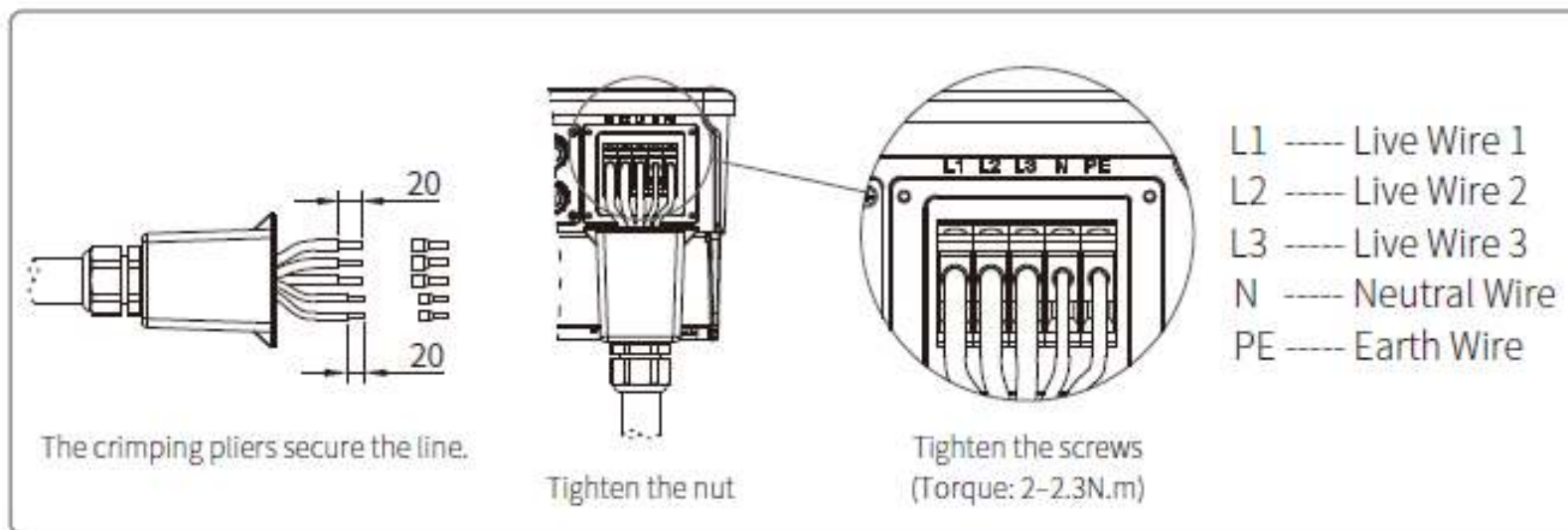
Inverter installation

HT Series Mounting



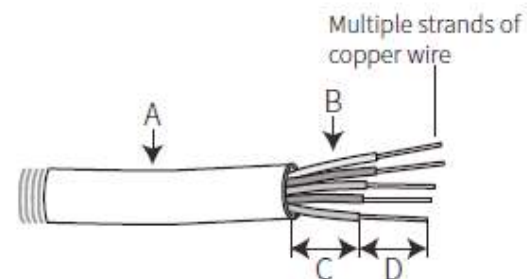
AC connection

SDT G2 and SMT Series



Grade	Description	Value
A	O.D	22-30mm
B	Section area of conduction material (mm ²)	10-25mm ² (it is recommended to use 16mm ² copper wire)*
C	Length of bare wire	About 20mm
D	Length of wire	About 45mm

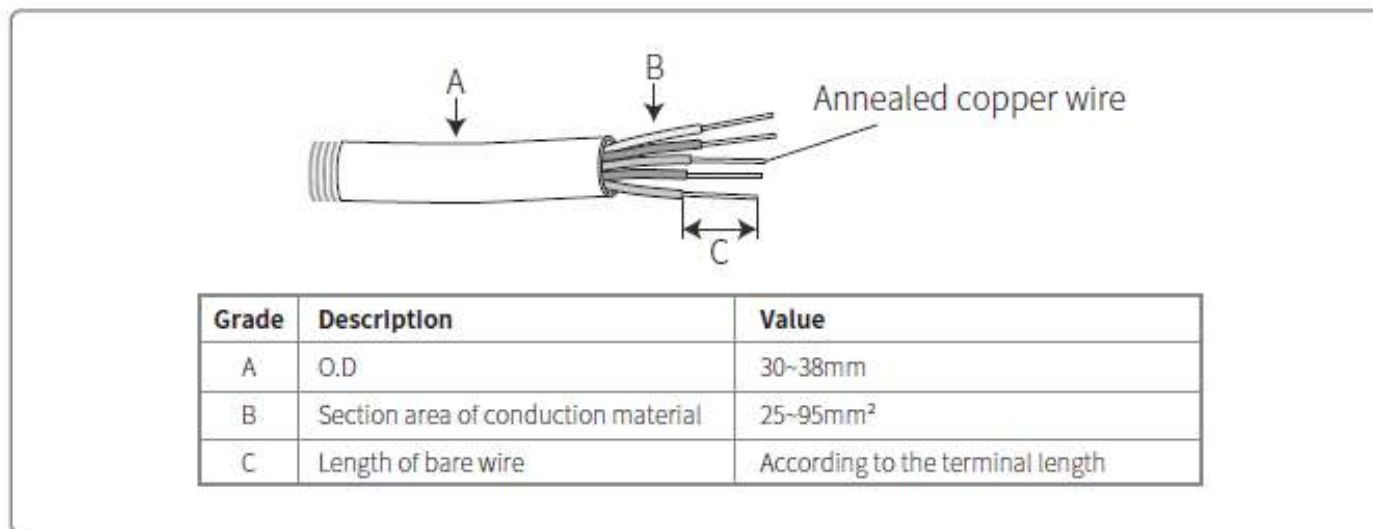
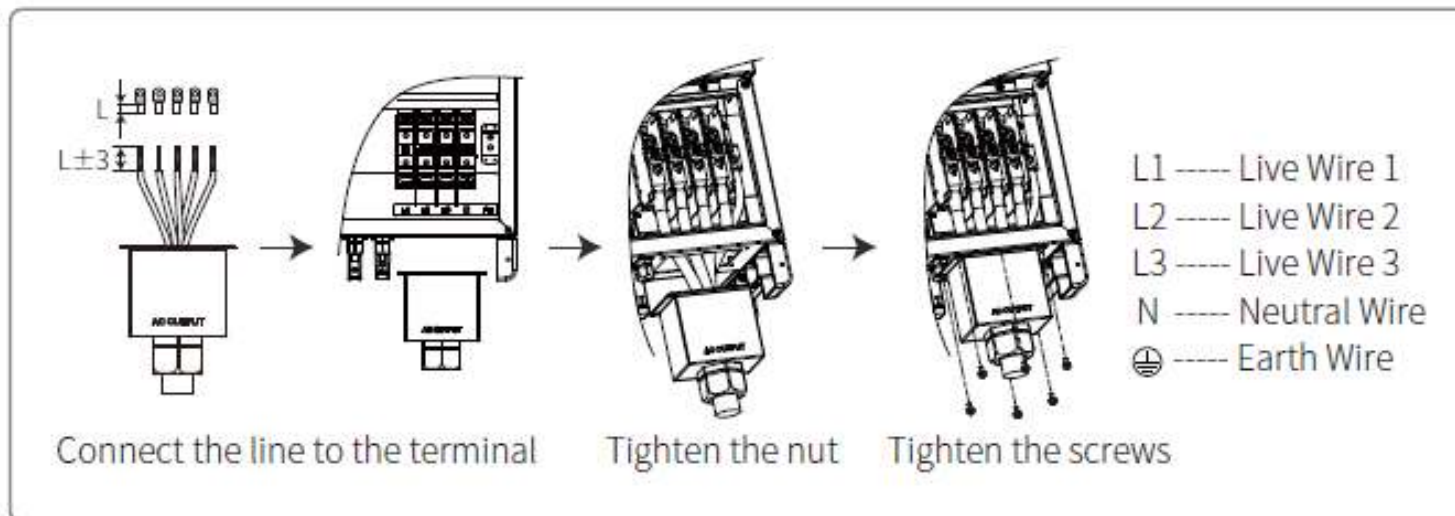
*if you choose aluminium wire, please contact the service provider for the aluminium terminal.



Grade	Description	Value
A	Outer diameter	17~20kW: 18-25mm 25kW: 22-32mm
B	Conductor Material Sectional Area	17kW: 6-16mm ² 20kW: 10-16mm ² 25kW: 10-25mm ²
C	Bare wire length	45mm around
D	Wire length	12mm around

AC connection

MT Series

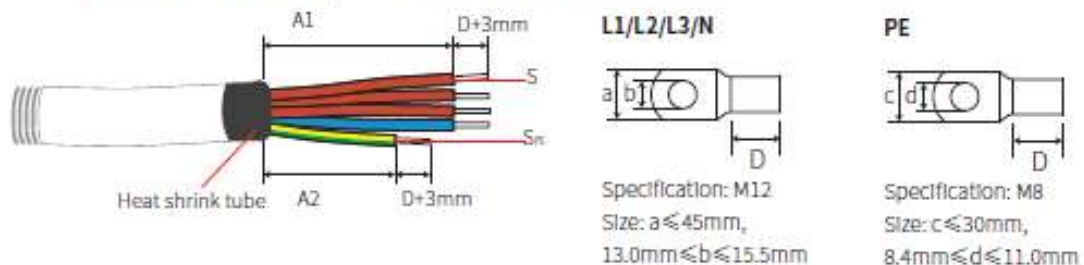


AC connection

HT Series

Step 1: Select a suitable AC cable and strip the wire.

For specific specifications, refer to the table below.

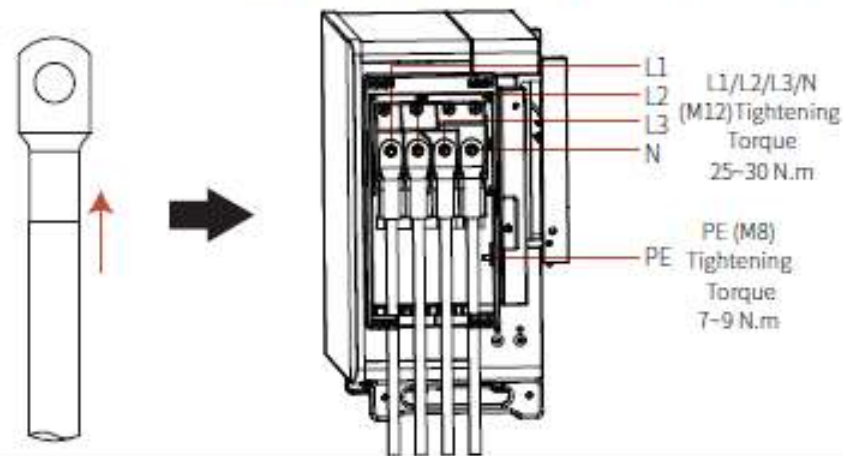


Code	Description	Value
A1	Wire Length	Approximately 500mm
A2	Wire Length	Approximately 380mm
D	Conductor Length	Cold terminal +3mm
S	Cross-Sectional Area of Conductor	70-300mm ²
S _n	Cross-Sectional Area of Conductor	$\geq S/2$

Step 2: Connect to the communication terminal.

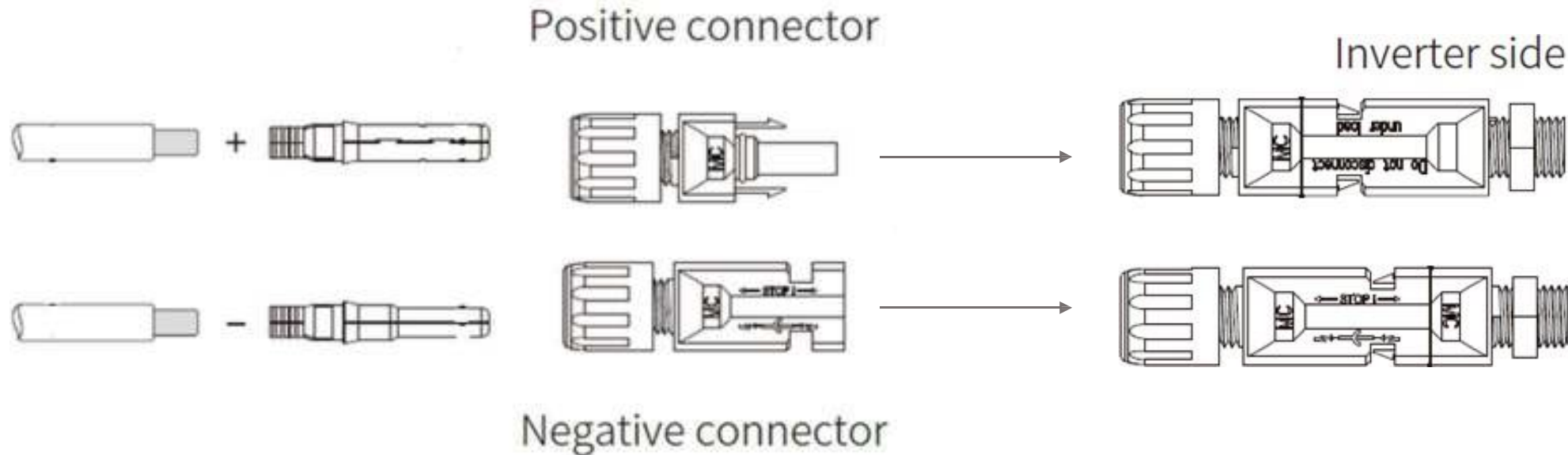


Step 6: Connect AC cables to the terminal block, and settle the AC cables to the designated crimping module.



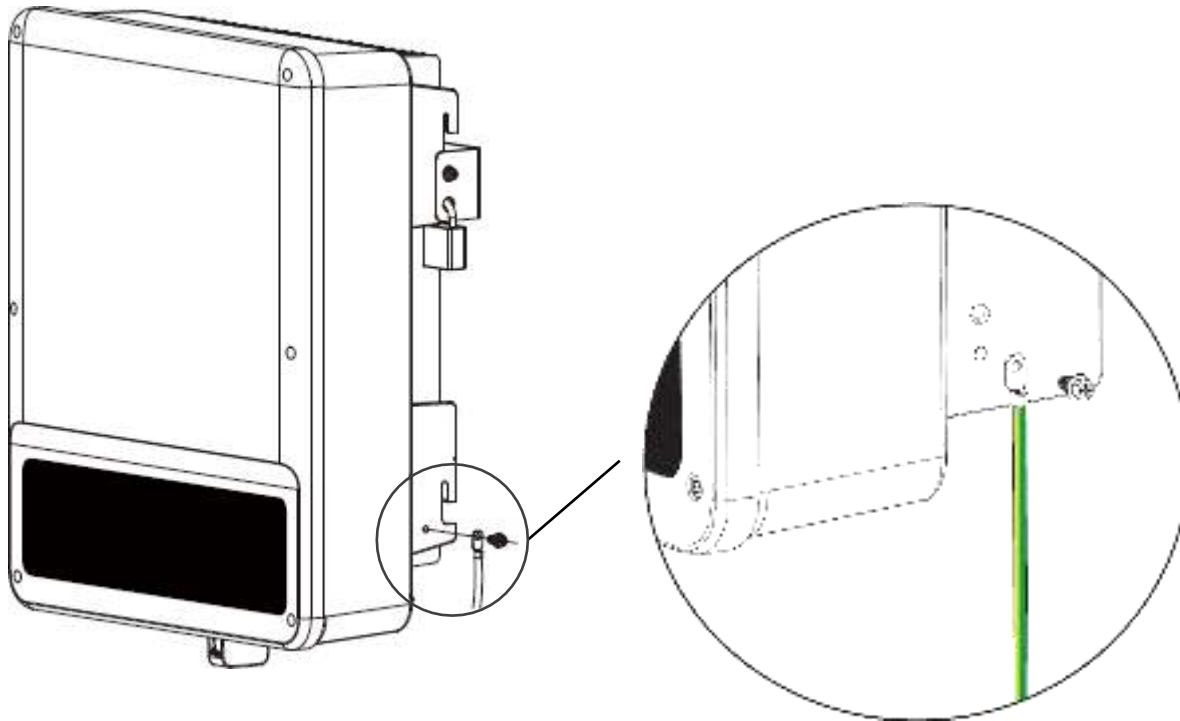
DC connection

1. Crimp positive and negative pins onto DC conduction – use appropriate and calibrated crimping tool
2. Insert pin inside MC connector
3. Tighten MC connector gland
4. Connect MC connector into inverter DC input

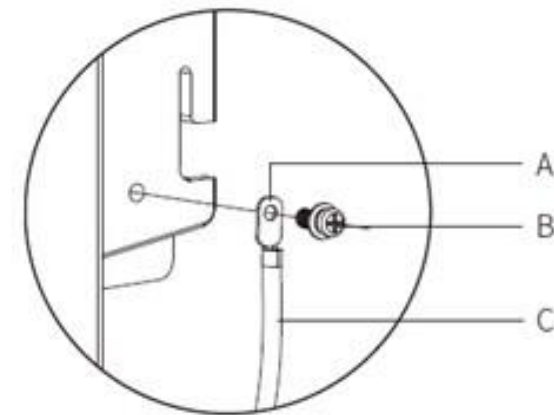


Potential Earth connection

- Earth connection is located on the body of the inverter
- Use supplied earth terminal for connection – observe maximum cable size



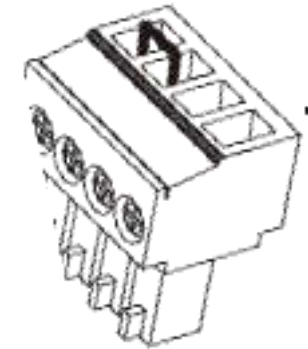
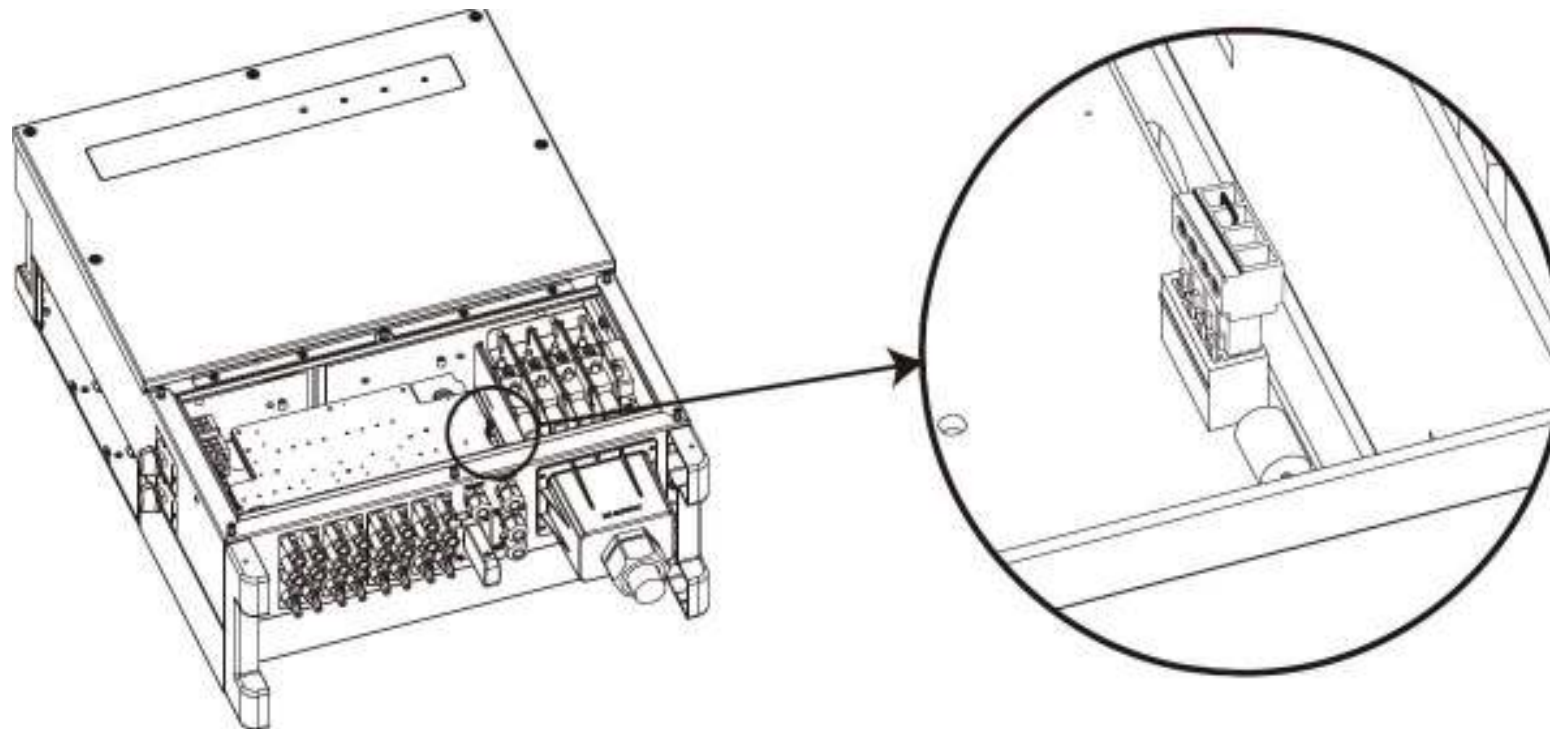
NO.	Name	Explanation
A	Cold-pressed terminal	
B	Screw	(Observe the manual)
C	Green & Yellow Cable	(Observe the manual)



Remote Shutdown terminal

MT series

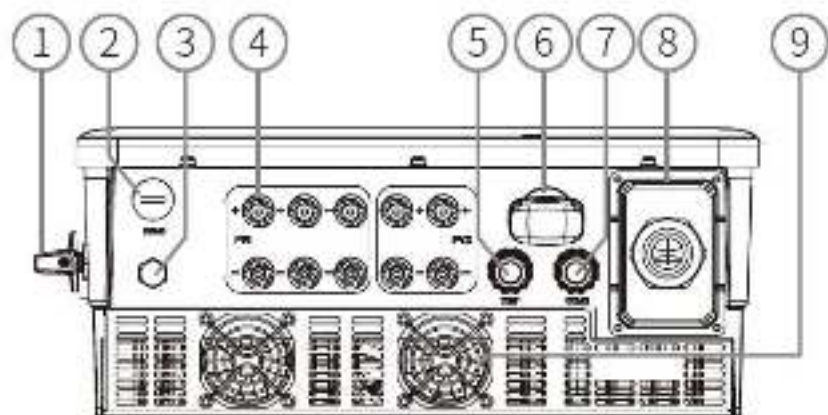
If the remote shutdown feature is NOT used, the connector MUST be installed with terminals 1 and 2 shorted with a wire or resistor (supplied



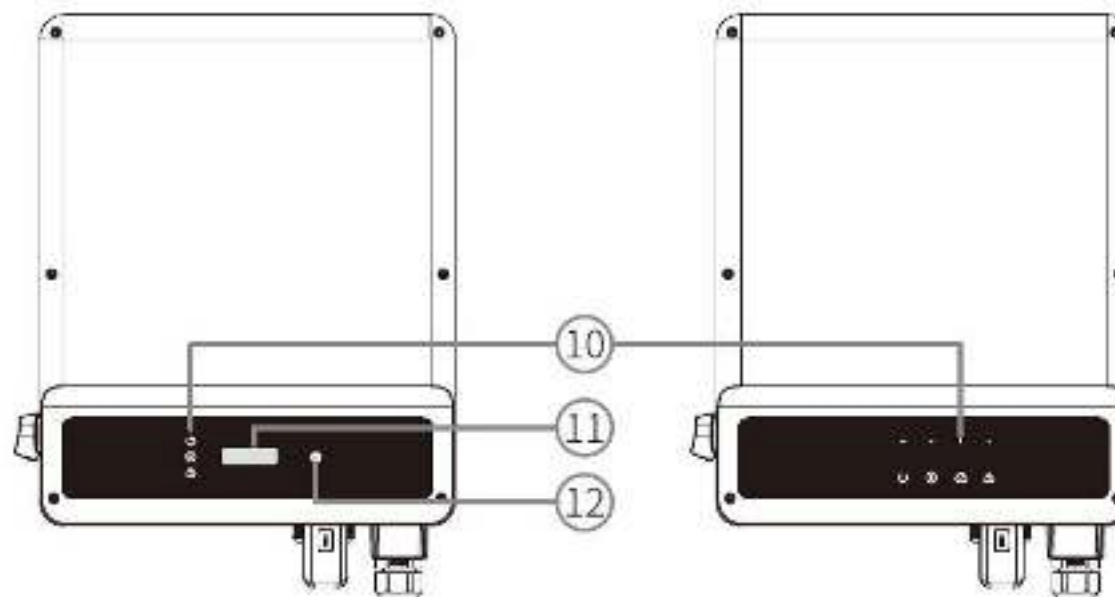
pin terminal-4

Commissioning: SDT G2 series

17~25KW

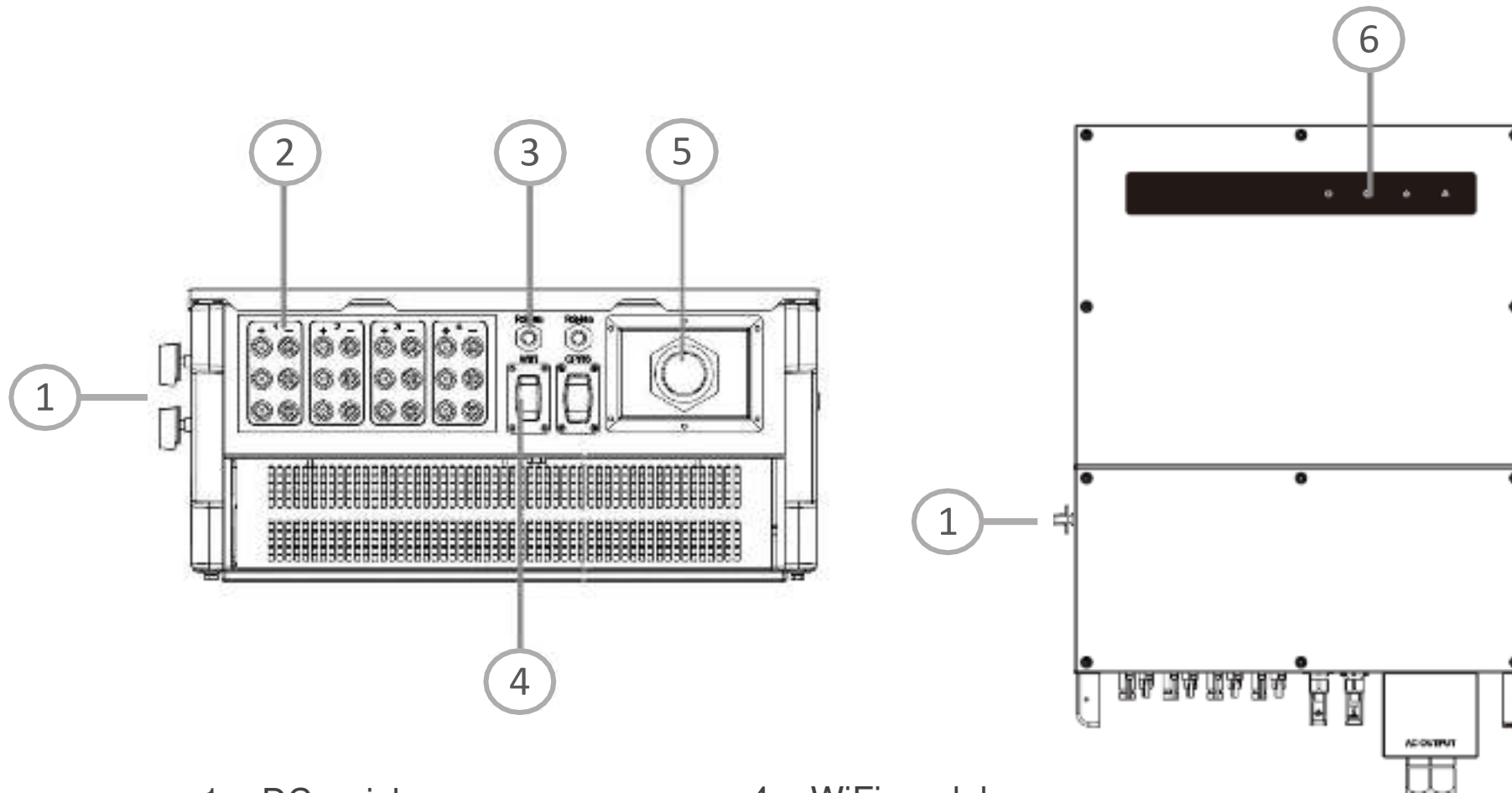


1. The DC switch
2. USB port (Optional)
3. Waterproof vent
4. PV input port (17/20kw PV 4 pairs, 25 KW PV 5 terminal)



5. Smart Meter / RS485
6. Com module
7. DRED(6-Pin) / Remote shutdown(2-Pin) (Optional)
8. AC output port
9. Fan
10. Indicator Lights
11. LCD
12. Button

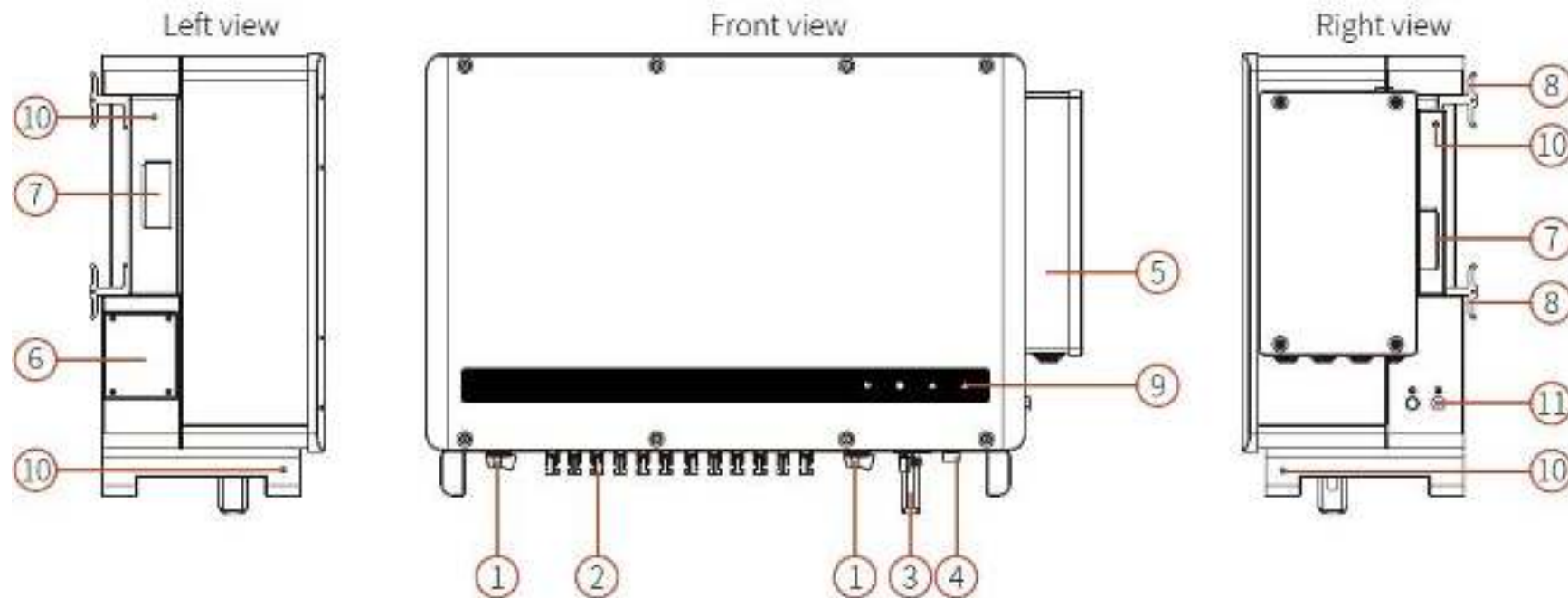
Commissioning: MT series



- | | |
|-----------------------|-----------------------|
| 1. DC switch | 4. WiFi module |
| 2. PV input terminals | 5. AC output terminal |
| 3. RS485 port | 6. LED |

Commissioning: HT series

Series without display



- 1. DC switch
- 2. DC terminal
- 3. Communication module
- 4. RS485 communi-

- cation port
- 5. AC junction box
- 6. Fan assembly
- 7. Handle
- 8. Back hanger

- 9. LED indicator
- 10. Lifting ring, handle mounting hole
- 11. Ground port

GoodWe Apps



SolarGo
Residential
Commercial &
Industrial setting



PV Master
Energy storage
setting



SEMS
Monitoring

Internet setup: WiFi (SEMS)



- TIPS**
- Wifi connection before turning on AC switch
 - Set Flight mode, if Wifi smartphone detection unsteady



Solar-WiFixxxxxxx
)Solar-WiFi + the last 8 digits
 of the inverter serial
 number) PW: **12345678**



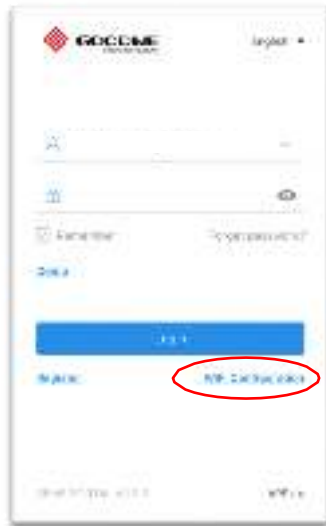
Turn ON the DC switch of the inverter

Open Settings of the Smartphone

Open Wi-Fi and select "Solar Wifi"

Write the password

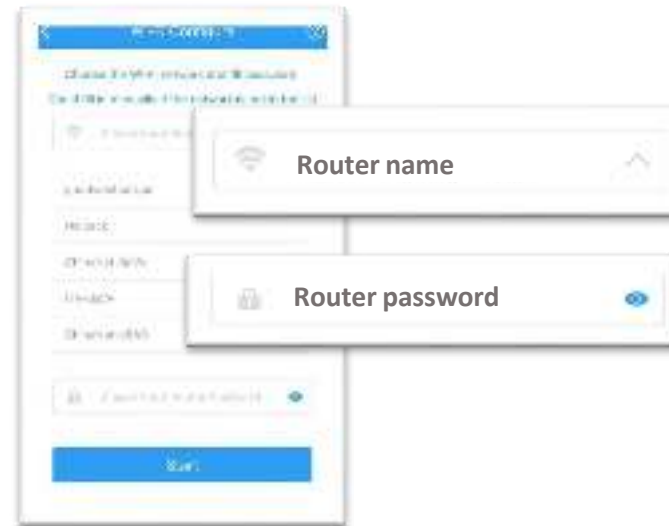
Open SEMS App



Select "Wifi configuration"



Click "Next"



Find the router and write the password of the router

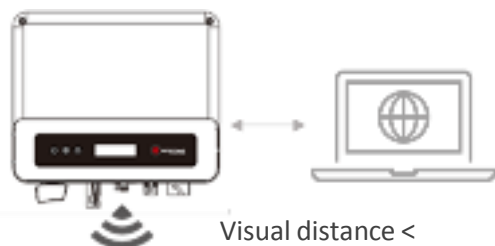


Click "Ok" to finish the Wifi setting

TIP: Observe the LED

Internet setup: WiFi (Browser)

TIP: Wifi connection before turning on AC switch



Visual distance < 5m

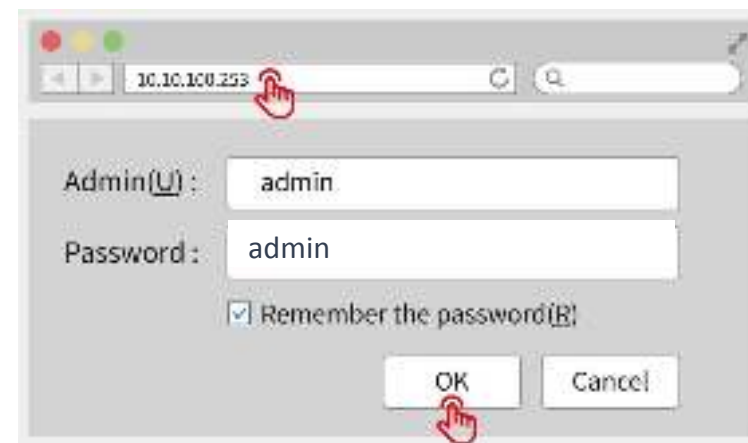
Turn ON the DC switch of the inverter



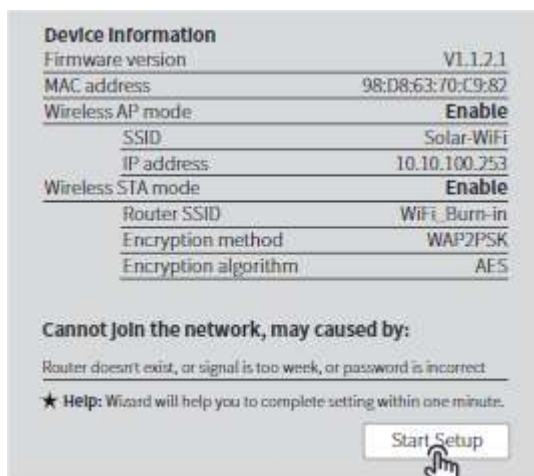
Open Internet Access



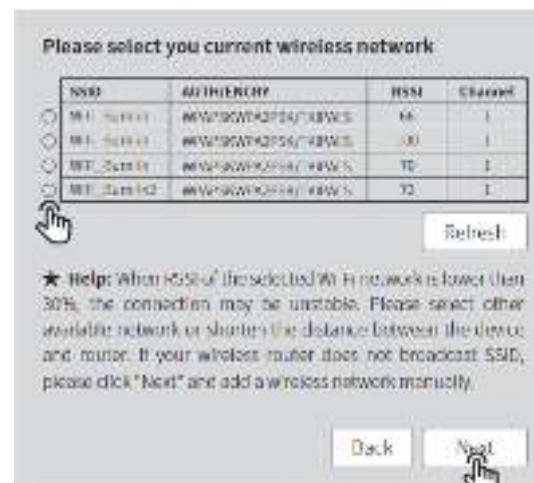
Select "Solar Wifi"



Write Open browser and enter <http://10.10.100.253>



Click "Start Setup"



Select customer's Wifi network



Enter customer's router password and complete

TIP: Observe the LED

Grid setup (SolarGo)



Distancia visual < 5m



TIP: Set Flight mode, if Wifi smartphone detection unsteady



Solar-WiFixxxxxxx

Solar-WiFi + the last 8

digits of the inverter

serial number

PW: 12345678



SolarGo

Turn ON the DC switch of the inverter

Open Settings of the Smartphone

Open Wi-Fi and select "Solar Wifi"

Write the password

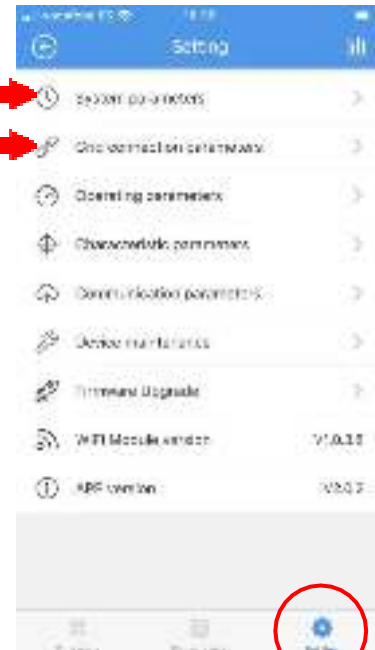
Open Solar Go App



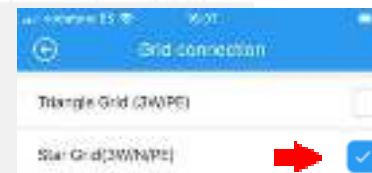
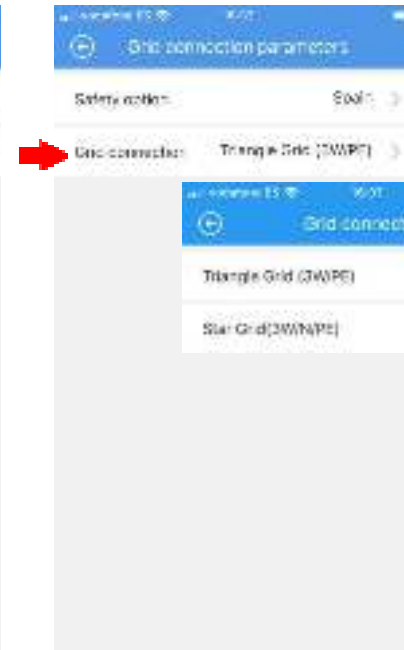
Home screen



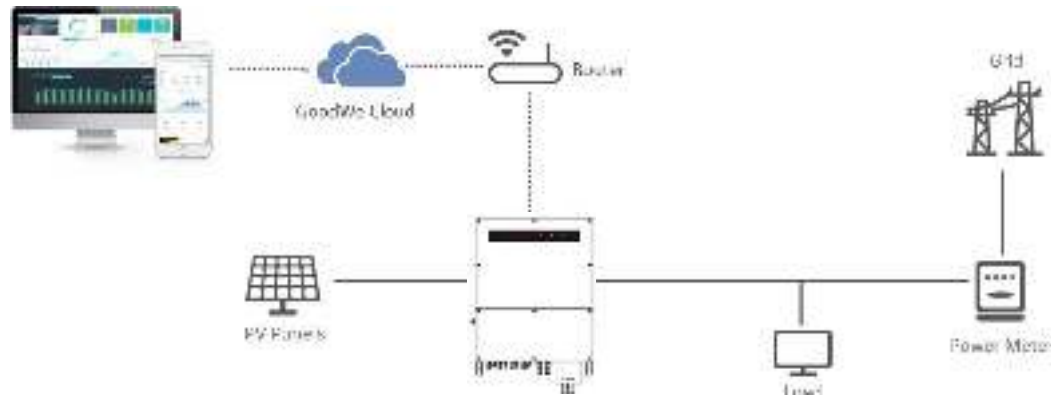
Parameters



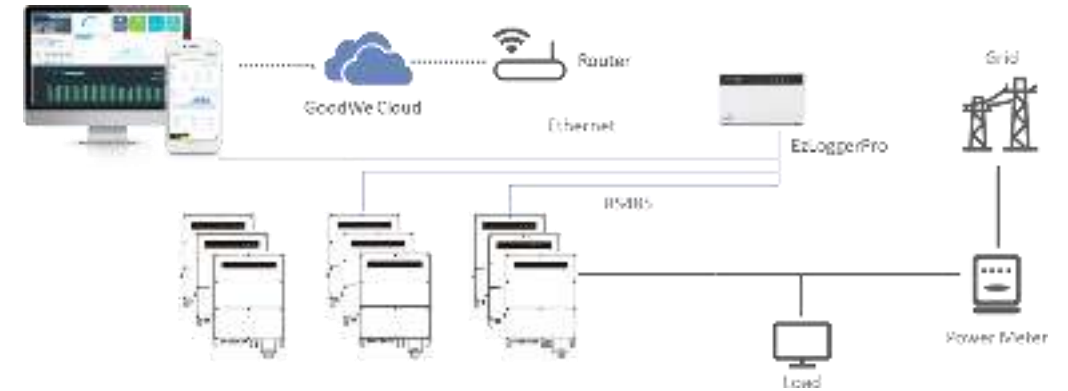
Setting



Monitoring diagrams – C&I

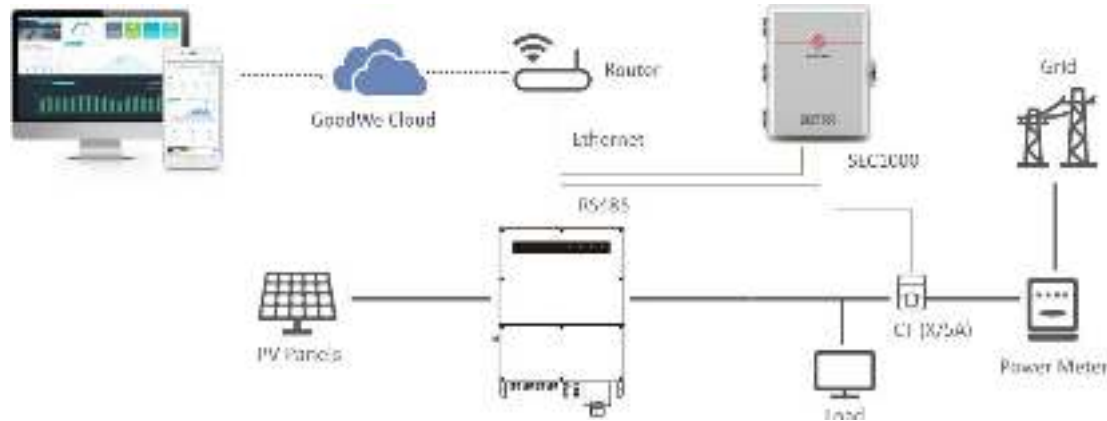


**PV Monitoring
(Wi-Fi / LAN)**

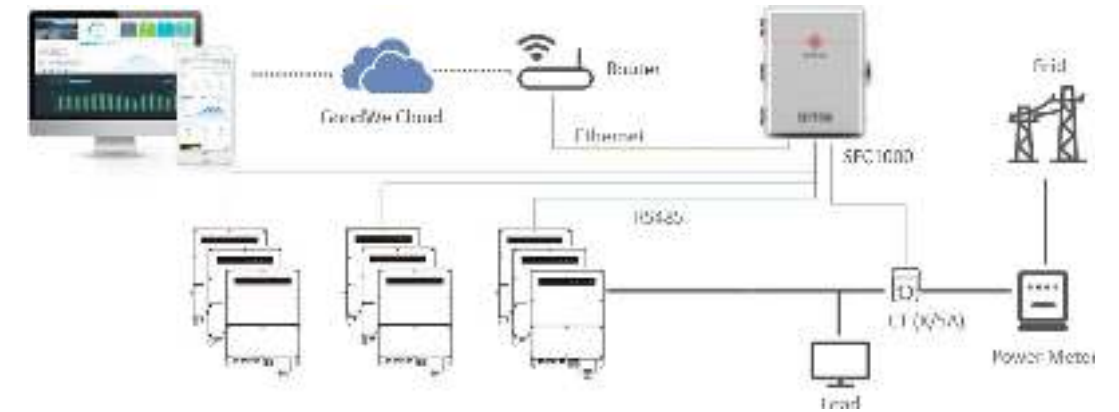


Multiples Inverters (up to 60 Inv.)

PV (EzLoggerPro)



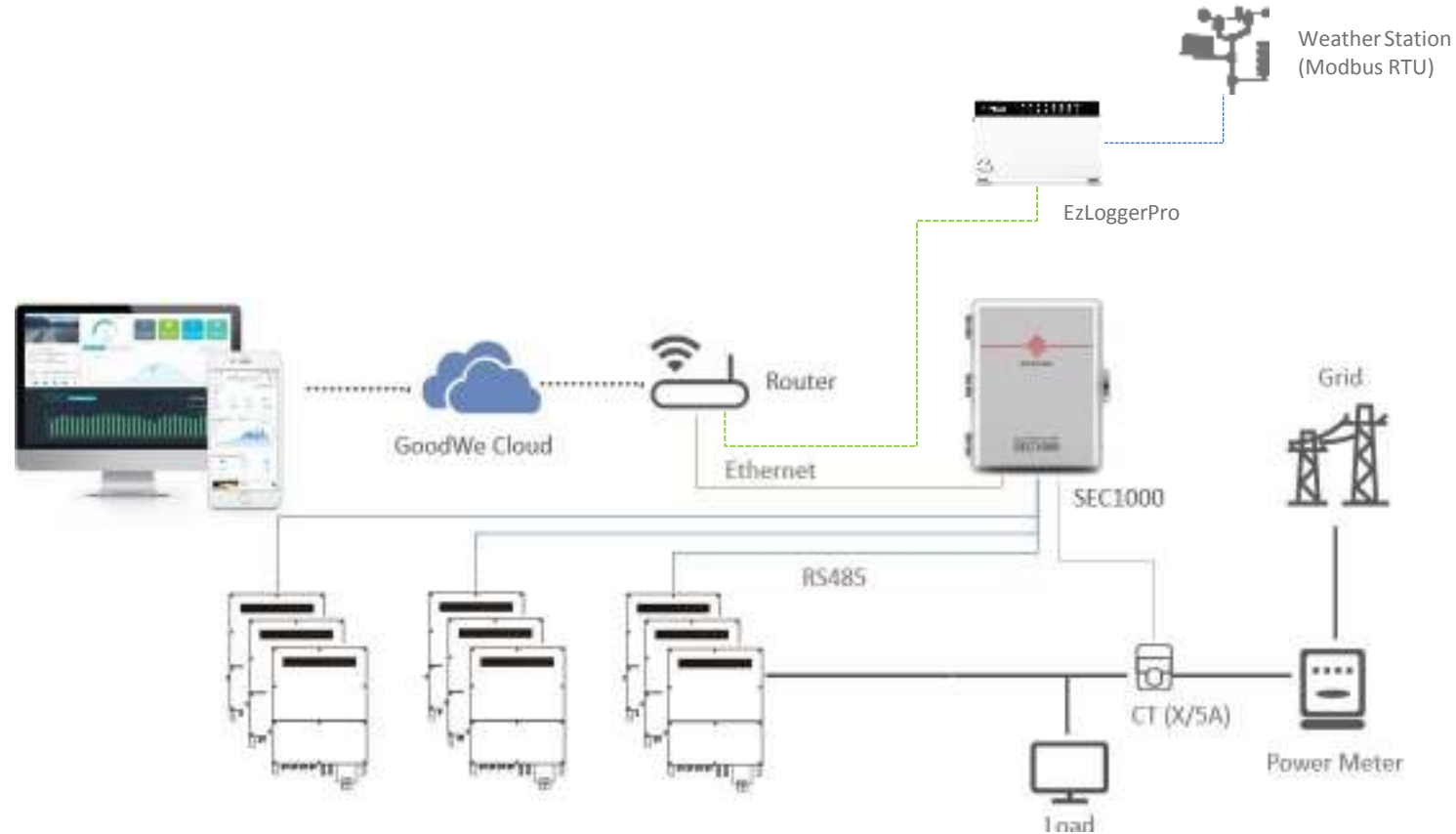
PV + Load monitoring + Export power limit (SEC1000)



Multiples Inverters (up to 60 Inv.)

PV + Load monitoring + Export power limit (SEC1000)

Monitoring diagrams – C&I + Weather Station

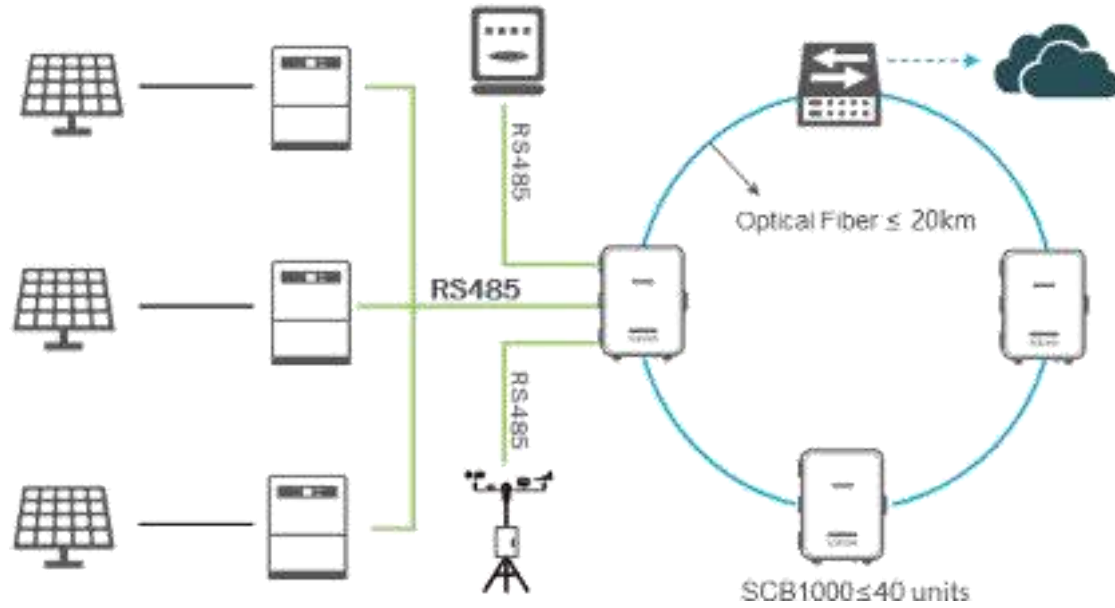


Multiple inverters (up to 60 Inv.)

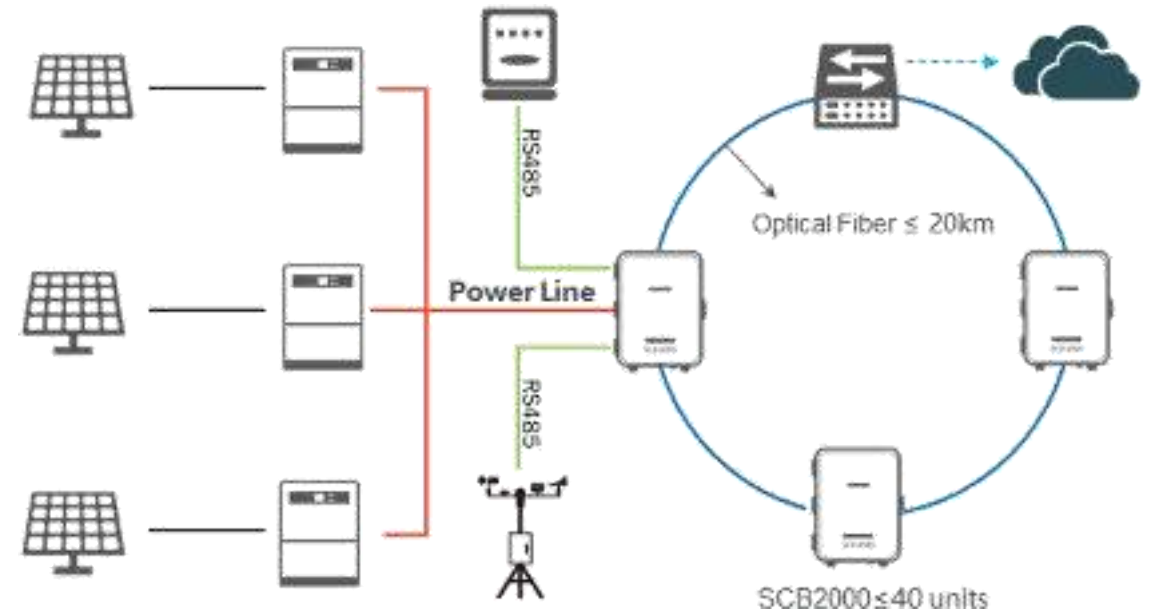
PV + Load monitoring + Power limit (SEC1000)

Weather Station (EzLoggerPro)

Monitoring diagrams – C&I

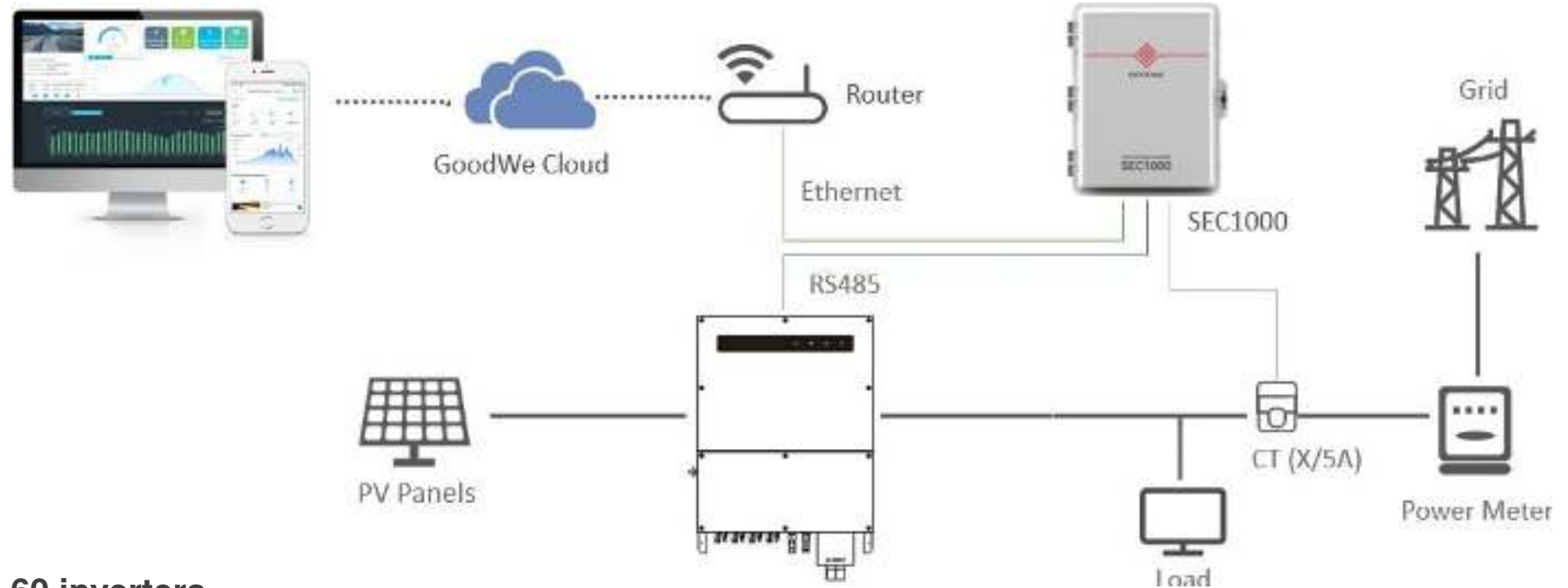


Multiple inverters
Communication by RS485 & Optical fiber
SCB1000



Multiple inverters
Communication by PLC & Optical fiber
SCB3000: SMT & HT Series
SCB2000: MT series

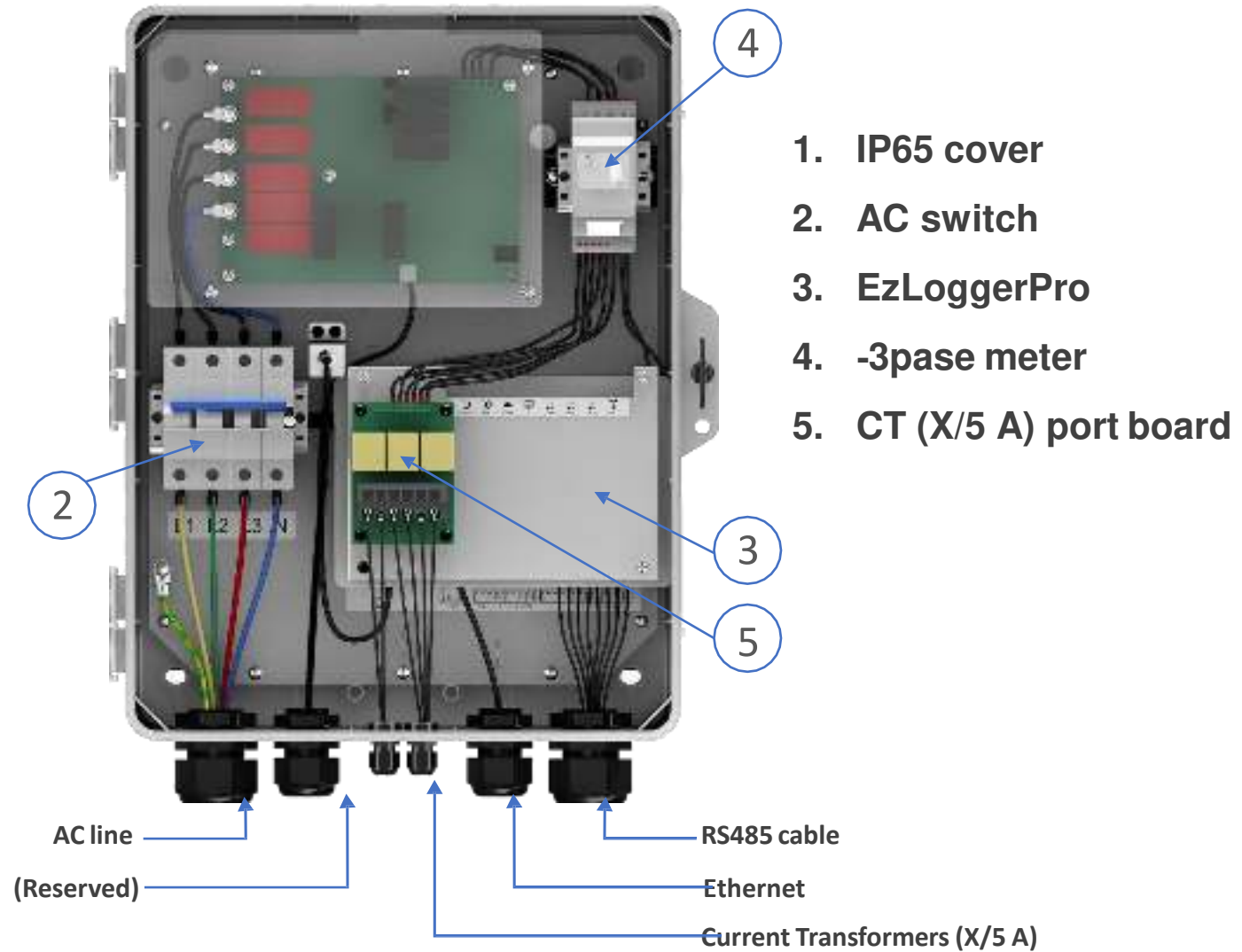
Smart Energy Controller for C&I applications



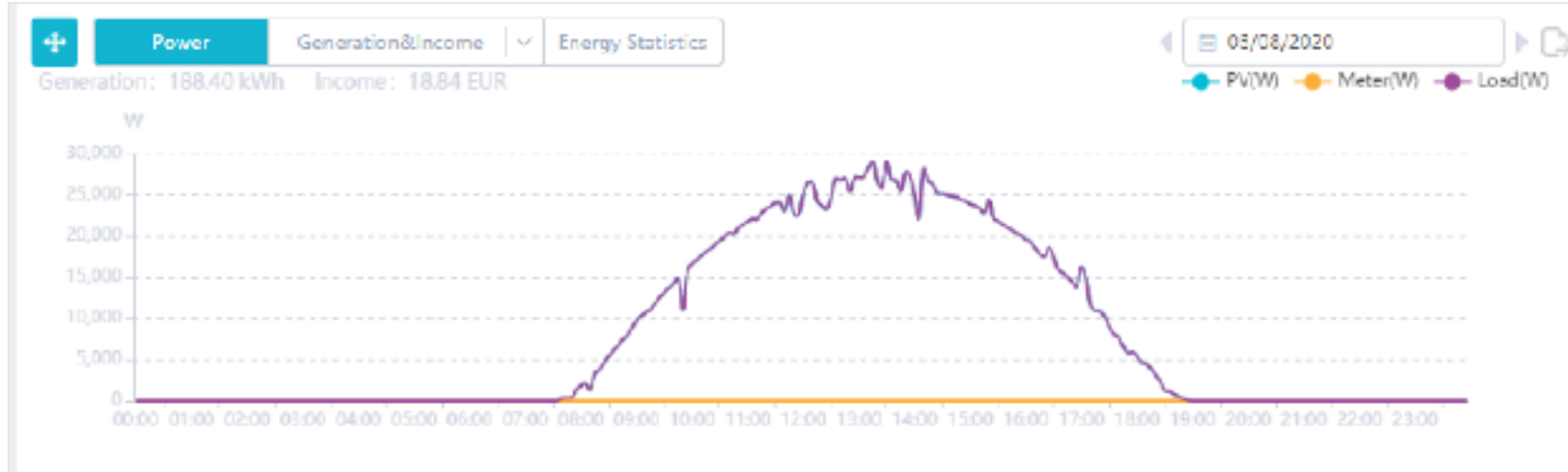
SEC1000

- Monitoring up to 60 inverters
- Power limit function
- Load monitoring
- Reactive power control
- Massive inverter FW upgrade

SEC1000



SEC1000- PV plant curves on SEMS



SEMS Portal: PV Plant info



Basic system info

Weather forecast

Linked devices

Device information

Current power

Total icons

System graphs:
PV, Load, Meter..

SEMS Portal: Device info



Inverter information

Inverter SEC **Curve** >

Model	GW50E-MT
SN	9020EMTS19480151
Devicecode	02M000
Capacity	50 kW
Connected	07/02/2020 21:08:30
Power	29.507 kW
Output Voltage	410.2/410.0/412.0 V
AC Current	41.9/41.8/41.8 A
AC Frequency	49.99/49.99/49.99 Hz

Today Generation

93.1

kWh

Working

Total Generation: 66202.7kWh

Total Hours: 3425hour

Inverter Temp (C/F)	40.5/0	°C/F/Hz
DC voltage/current 1	553.2/16.1	V/A
DC voltage/current 2	545.5/16.0	V/A
DC voltage/current 3	545.5/11.2	V/A
DC voltage/current 4	544.4/11.1	V/A
String current 1	5.1/5.2/5.6	A
String current 2	5.2/5.2/5.5	A
String current 3	5.2/5.9	A
String current 4	5.4/5.7	A

Curve data

information1000 SEC

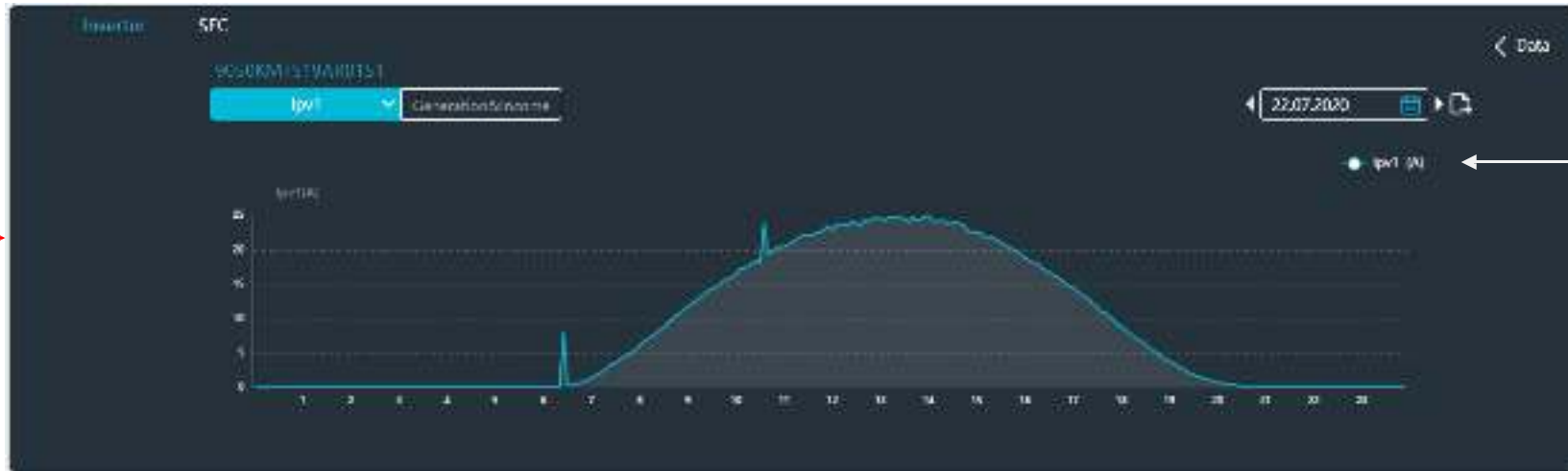
Inverter **SEC**

91000SEC1000000	Online	
Data Update	07/02/2020 21:08:45	
CF Parameter	CF Ratio	50
Reactive Power Compensation	Target PF	-
Export Power Limit	Total Capacity	50 kW
	Export Power Limit	50 kW
Version	SEC1000	E09M03

SEMS Portal: Curve info per inverter



- Power
- Power
- Vpv1
- Vpv2
- Vpv3
- Vpv4
- Ipv1
- Ipv2
- Ipv3
- Ipv4
- Vac1
- Vac2
- Vac3
- Iac1
- Iac2
- Iac3
- Fac1
- Fac2
- Fac3
- Work Mode
- Temperature
- Today Generation
- Total Generation
- HTotal
- Istr1
- Istr2
- Istr3
- Istr4
- RSSI
- Pac



SEMS Portal: Dashboard – Global Plant Management



COMMERCIAL & INDUSTRIAL SOLUTION 17-136 kW



HT

100-136kW / 10 to 12 MPPT



Up to 12 MPPT



Full Load Operation
at 50°C



Up to 15% AC Output
Overloading



Arc-Fault Circuit
Interrupter



Up to 50%
DC Oversizing



Power Line
Communication



MT (LV)

50-80kW / 4 MPPT



SMT (LV)

25-36kW / 3 MPPT



SDT

17-25kW / 2 MPPT

Key Features - Easy for Installation



Compact

Small size & light weight



Plug & Play

Both the AC and DC terminals are plug & play



Bluetooth

Quick setup via Bluetooth



Key Features - High Yields

Oversizing & Overloading

Up to 100% DC oversizing and
15% AC overloading



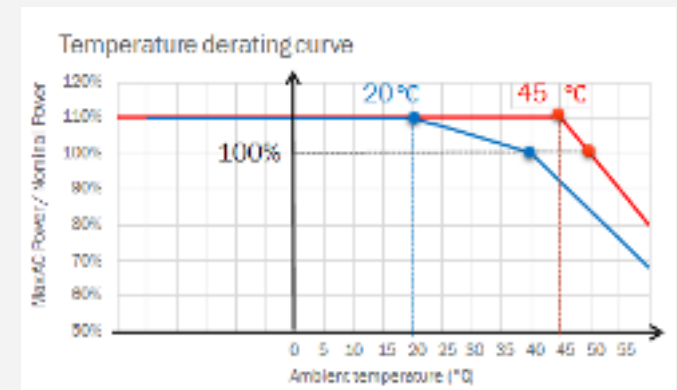
High Efficiency

Up to 99% efficiency



Performance under high temperatures

100% power at 50 °C



Key Features - Safety Ensured



AFCI 2.0

Quick Fire Hazard
Detection



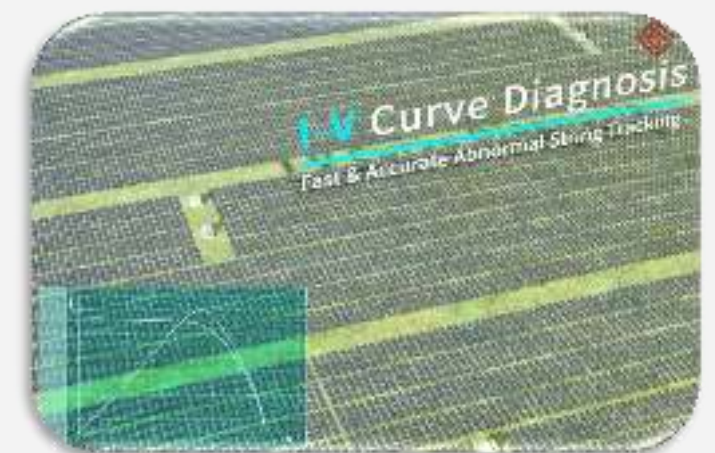
IP66 & Type I Surge Protection

Well protected from rain
and lightning, suited for
outdoor installation



I-V Curve Diagnosis

Fast & Accurate Abnormal
String Tracking



THANK YOU FOR YOUR TIME

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