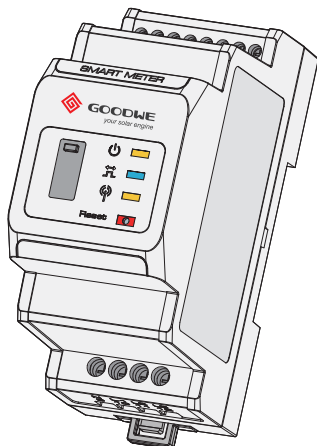# Smart Meter
USER MANUAL

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GOODWE
your solar engine

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01 INTRODUCTION

GoodWe Smart Meter is designed with high precision small dimensions, convenient operation and installation. It is available for both single-phase and three-phase grid system connection to detect voltage, current, power and energy, for working with inverters including SEMS systems for the purpose energy management.

Any fault or damage caused by misoperation or disobeyal against the rules on manual is beyond GoodWe warrenty cover range.

PACKING LIST

1* Smart Meter
1* Screw Driver
1* USB Seal

1* CT (Current Transformer)[1]
4* Cable Connection Terminals
1* RJ45-to-Pin Cable[2]

> **NOTE:**
> *[1] A three-phase Meter will contain 3 CT clamps.*
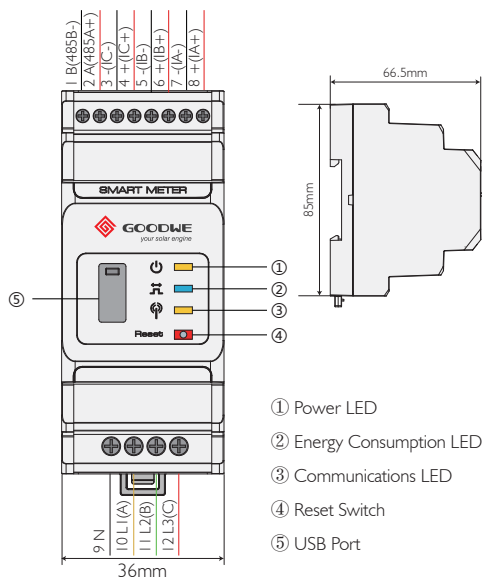> *Specifications are subject to the physical product.*
> *[2] Only suitable for RS485 cable connection on RJ45 port of GoodWe hybrid inverters.*

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02 OVERVIEW

2.1 SMART METER OVERVIEW

① Power LED
② Energy Consumption LED
③ Communications LED
④ Reset Switch
⑤ USB Port

2.2 CT OVERVIEW
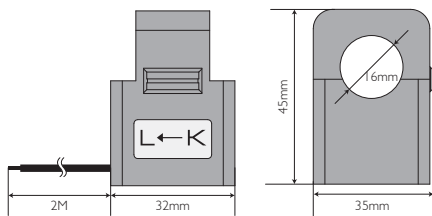
03 INSTALLATION INSTRUCTION

3.1 INSTALLATION ENVIRONMENT

Protection Class: IP20 (for indoor use)
Operating Temperature: -20~60℃

3.2 INSTALLATION （with DIN track）

① Pull to release the retaining clip
② Mount the Meter on the track and push the retaining clip up (a click sound indicates it is installed well)

3.3 WIRING CONNECTION

3.3.1 WIRING FOR SINGLE-PHASE METER

- Correct direction of CT: House (K)→Grid (L).

⚠ Incorrect connection or direction will cause incorrect data.

3.3.2 WIRING FOR THREE-PHASE METER

- Correct direction of CT: House (K)→Grid (L).
- Ensure CT and corresponding supply cable are connected to the same phase.

⚠ Incorrect connection or direction will cause incorrect data and may damage the meter.
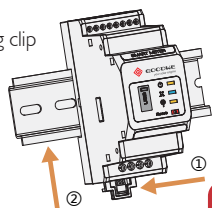
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04 ELECTRICAL DATA

MODEL		GM1000	GM3000
APPLICATION		Single-phase	Three-phase
Voltage	Nominal Voltage	230Vac	3L+N/400Vac
	Voltage Range	0.7~1.2Un	0.7~1.2Un
	Frequency	50Hz/60Hz	
Current Input	Nominal Current	CT in:120A/40mA	
	Current Range	0.48A~120A	
Self-Consumption		3W max	
Data Detection		Voltage/Current/Active Power/Reactive Power/Power Factor/Frequency	
Energy Calculation		Active/Reactive Power Energy	
Precision	Voltage/Current	Class 1	
	Active Power	Class 1	
	Reactive Power	Class 2	
Comm.	With Inverter	RS485 (Bund Rate 9600 / ModBus Protocol / communication cable max. length 100m)	

05 INTERFACE

5.1 INDICATORS

* *Power LED :*
  Normal operation: ON
* *Energy Consumption LED:*
  Consuming: On
  Generating: Blinking
* *Communication LED:*
  Transmitting data: Blinking
  Resetting: Blink 5 times

5.2 RESET BUTTON

Press	Function
<3s	Meter Reset
5s	Meter Settings Initialization
>10s	Meter Initialize settings and clear energy data

5.3 USB PORT

For after-sales maintenance