Single phase Din-rail Meter
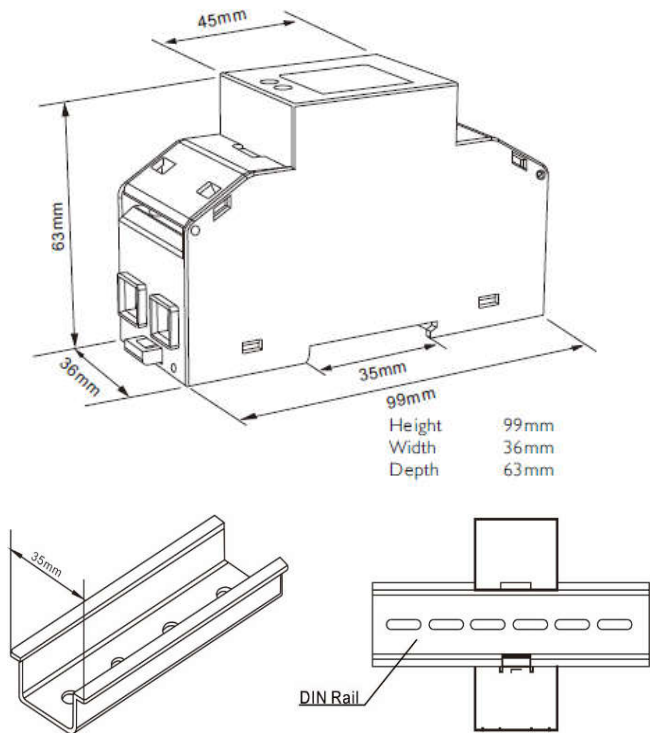
1. Function introduction

-. Detect active/reactive energy, power, frequency, Max demand, voltage, Current and other important power parameters in one screen

-. Provide energy import and export measurement (IMP & EXP)

-. High light white backlit LCD screen

-. Energy pulse output

-. RS485 Modbus communication (optional)

-. Standard 35mm din rail mounting

-. Maximum 100A current access

-. Accuracy: Class 1.0s

19D-201 meter is suit for for single-phase measurement, use scenarios such as residential, public facilities, and industrial use. 19D-201 can measure and display various important power parameters, optional communication ports support remote reading and monitoring. Bi-direction metering makes 19D-201 is an excellent choice for solar energy industry.
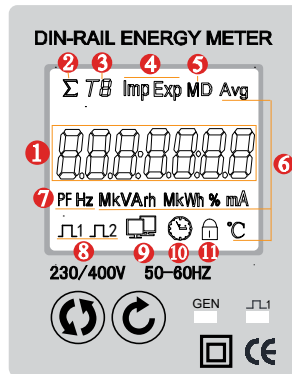
Panel & Screen introduction
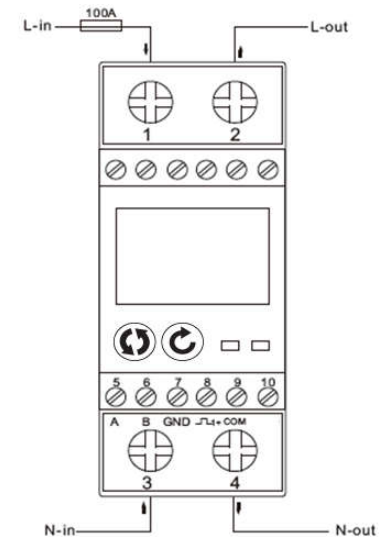
1.- 7 digital show energy value

2.- Symbol for SUM energy record value

3.- Symbol for multi-tariff function

4.- Imp for energy consumption, Export for energy generate

5.- Symbol for Maximum demand

6.- Symbol for average value

7.- PF=power factory; Hz=Frequency

8.- Pulse output channel 1 and channel 2

9.-symbol for communication active

10.- symbol for timer

11.- symbol for screen locked

↻ Click for "left", can move cursor to left or change to forward screen
Press and hold for Enter operation menu

↻ Click for "right", can move cursor to right or change to next screen
Press and hold for confirm setting

2. Specification

Measurement & Display	
Voltage	Rated 230V RMS value, Accuracy 0.5%,
Current	Rated 10A, Max 100A, Start amp 0.04A, RMS value. Accuracy 0.5%; Overload 30times In in 0.01sec
Frequency	50/60Hz, Accuracy ±0.01Hz
Display	LCD with white backlit
Maximum display value	9999999MkWh
AUX Power	85-275V AC, <2W/10VA
Output	
Digital port	RS-485 MODBUS-RTU
Pulse port	1600imp/kWh
Other	
Working environment	-25~55°C Altitude ≤2500m, 0~95%RH, non-condensing, non-corrosive gas
Storage environment	-40~70℃
Voltage tolerance	2KV 1min
Shock voltage	6KV-1.2uS waveform
Insulation	Input, output, power supply to Shell >5MΩ

3. Install of meter

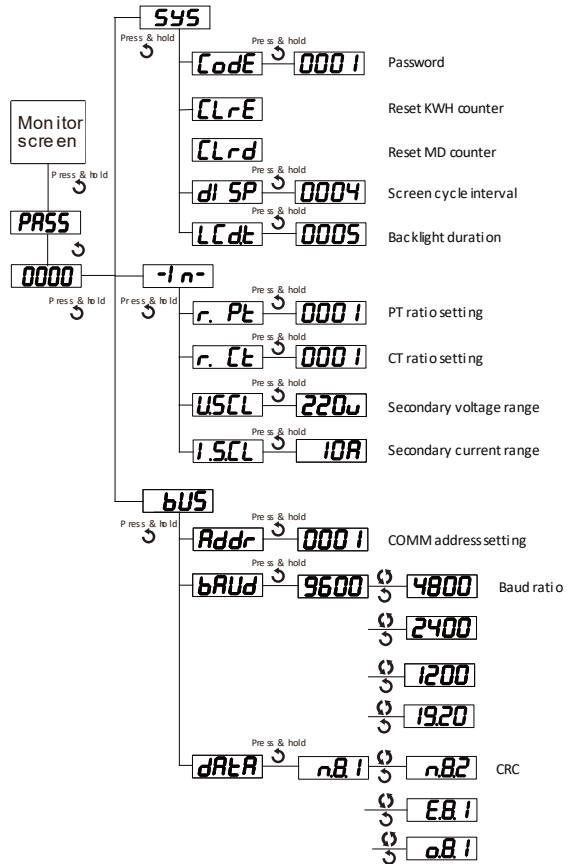| Dimensions (L x W x H)	Din-rail	Notes
99x36x63 (mm)	35mm	

4. Wiring to grid

Wiring Notes!!

-. Must choose suitable cable size to connection, please refer the meter
   measurement range and actual load condition.

-. The communication wire must use shielded twisted pair.

-. Communication line RS485+, RS485- cannot be reversed.

-. If need long distance communication to host, must parallel connect
   100~120ohms resistor in both terminal of host to slave.

-. In 9600 baud rate, the cable length should less than 1200 meters.

5. Operation menu description

In regular measurement screen, press and hold ( ) button can access operation
screen. Panel main area will show "Pass" for ask password, then press and hold
( ) button can entry password (default are 0001)

Menu tree stretcher

MODBUS register map:

Primary side parameters				
Address	Data	Byte mode		Notes
0x00	U	float	2	Phase to Line Voltage, Unit: V
0x0c	I	float	2	Current, Unit: A
0x12	P	float	2	active power, Unit: kW
0x1a	Q	float	2	reactive power, Unit: kVar
0x22	S	float	2	apparent power, Unit: kVA
0x2a	PF	float	2	power factor, 0~1.000
0x32	FR	float	2	Frequency, Unit:0.01Hz
0x34	Ep+	float	2	Positive active energy, Unit: kWh
0x36	Ep-	float	2	Negative active energy, Unit: kWh
0x38	Eq+	float	2	Inductive reactive power, Unit: kVarh
0x3a	Eq-	float	2	Capacitive reactive power