

### Datasheet

- Single phase 100A direct fed
- MID B+D certified
- Accuracy class 1 (Active Energy)
- Bi-directional measurement for kW and kWh
- Configurable pulsed output (Import / Export kWh)
- Multi-parameter measurement
- Remote reading from platform
- WIFI signal strength
- Flexible system integration

SDM230-WIFI measures and displays the characteristics of single phase two wire(1p2w) supplies, including kWh, kVAh, kW, kVA, PF, Frequency, Voltage, Current, dmd, THD etc. It support Max.100A direct connection, saving the cost to install external CTs. Maximum demand current can be measured over preset periods of up to 60 minutes.

The meter support WIFI communication, Parameters can be up loaded to the platform to realize the one stop centralized management.

SDM230-WIFI is MID approved by SGS. Notified Body: 0598.



## Specification Table

Specification	
Nominal voltage(Un)	120V or 230V ac
Operational voltage	80%~120% of Un
Insulation capabilities	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV-1.2μS
Basic current (Ib)	10A
Maximum rated current (Imax)	100A
Operational current range	0.4% Ib-Imax
Over current withstand	30 Imax for 0.01s
Operational frequency range	50Hz for MID; 50/60Hz for non-MID
Internal power consumption	≤ 2W/10VA
Pulse output 1	1000imp/kWh(configurable)
Pulse output 2	1000imp/kWh
Max reading	999999.9 kWh
Accuracy	
Voltage, Current	0.5%
Frequency	0.2% of mid-frequency
Power factor	1% of unity (0.01)
Active power , Apparent power	±1% of range maximum
Reactive power	±1% of range maximum
Reactive energy(Varth)	Class 2
Active energy (Wh)	Class 1
Communication	
Wi-Fi Support	2.4Ghz b / g / n
Wi-Fi Data Freq.	Every second

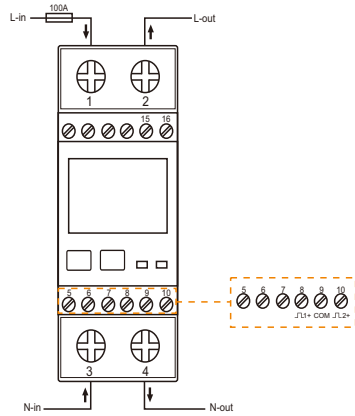
Performance criteria	
Operating humidity	≤ 90%, no condensing
Storage humidity	≤ 95%, no condensing
Operating temperature	-25°C - +55°C
Storage temperature	-40°C - +70°C
Reference temperature	23°C± 2°C
International standard	IEC 62053-21 / EN50470-1/3
Accuracy class	Class1/Class B
Installation category	CAT III
Mechanical environment	M1
Electromagnetic environment	E2
Degree of pollution	2
Protection against penetration of dust and water	IP51(indoor)
Insulating encased meter of protective class	II
Electrostatic discharges	8kV contact / 15kV air gap
Electromagnetic HF fields	IEC 61000-4-3
Electrical fast transients	4kV
Surge	4kV
Radiated & conducted emissions	EN 55022
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Pulse output	
Pulse outputs	2
Pulse output type	Passive
Pulse Output 1	Configurable
Pulse width	200 / 100(default) / 60ms
Pulse output 2	1000imp/kWh

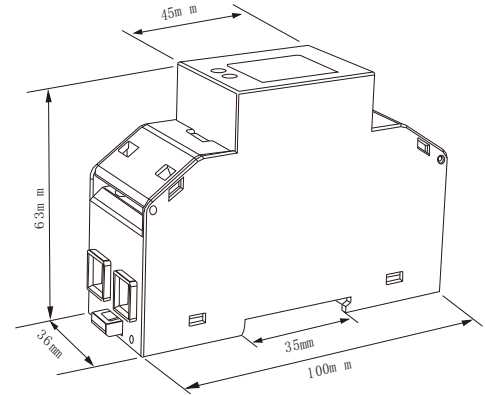
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### Wiring Configuration



### Dimension Drawing



Height 100mm  
Width 36mm  
Depth 63mm

### Conformity References

**Electromagnetic Compatibility:** EN61326-1:2021 & EN61326-2-3:2021

**Low Voltage Directive:** EN 61010\_1:2010+A1:2019 & EN 61010-2-30:2021+A11:2021

**MID DIRECTIVE:** 2014/32/EU