

DIN Rail Mounted / Single Phase / (100A) SDM230 Wifi



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PRECISION INSTRUMENTATION

Datasheet

- **Multi-measurement:** kWh, W, V, A, PF, Hz, dmd, etc.
- **LCD with backlit**
- **2 Pulse Output + WIFI communication**
- **Bi-directional Measurement**
- **Max. 100A Direct Load**
- **2 Module 36mm Width**
- **MID approved**



The SDM230-WIFI is designed for single-phase residential, utility and industrial applications. The device displays various important electrical parameters on a LED backlit LCD display. Bi-directional energy measurement makes the SDM230 an excellent choice for solar PV energy metering. An Energy app is available to view real time measurements and usage over time in graphs. Total kWh (Import + Export), Import kWh and Net kWh (Export - Import) Certified in the UK according to EU Directive 2014/32/EU. MID Certificate number 0120/SGS0206.

Specification Table

Specification		Accuracy	
Nominal voltage(Un)	120V or 230V ac	Voltage, Current	0-5%
Operational voltage	80%~120% of Un	Frequency	0-2% of mid-frequency
Insulation capabilities		Power factor	1% of unity (0.01)
- AC voltage withstand	4KV for 1 minute	Active power , Apparent power	±1% of range maximum
- Impulse voltage withstand	6KV-1.2μS	Reactive power	±1% of range maximum
Basic current (Ib)	10A	Reactive energy(Varh)	Class 2
Maximum rated current (Imax)	100A	Active energy (Wh)	Class 1
Operational current range	0.4% Ib-Imax		
Over current withstand	30 Imax for 0.01s	Pulse output	
Operational frequency range	50 or 60Hz	Pulse outputs	2
Internal power consumption	<2W/10VA	Pulse output type	Passive
Pulse output 1	1000imp/kWh	Pulse output 1	Configurable
Pulse output 2	1000imp/kWh(only for SDM230DR/Bi)	Pulse width	200/100(default)/60ms
Pulse output 2	999999.9 kWh	Pulse output 2	400imp/kWh
Environment		Wifi communication	
Operating humidity	≤90%	Wi-Fi support	2.4Ghz b/g/n
Storage humidity	≤95%	Wi-Fi data freq.	Every second
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 II		
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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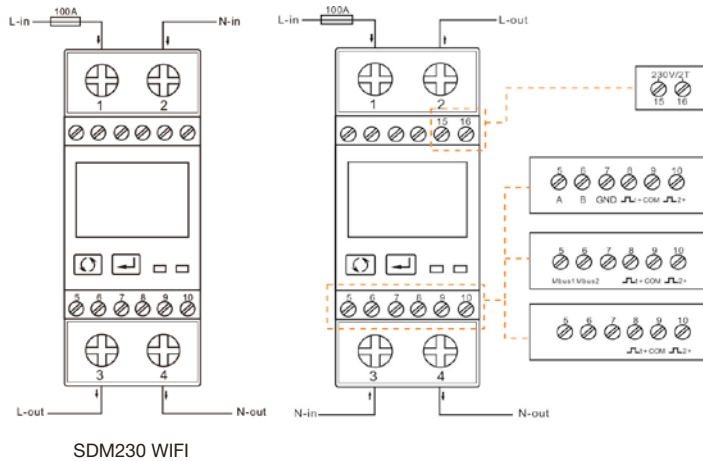
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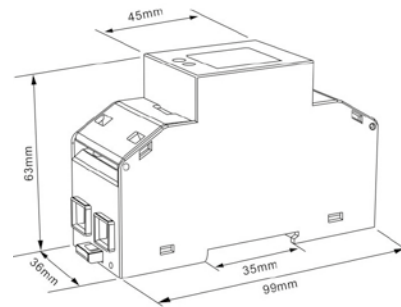
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Wiring Configuration



Dimension Drawing



Height 99mm
Width 36mm
Depth 63mm

Conformity References

Electromagnetic Compatibility: EN61326-1:2013 & EN61326-2-3:2013

Low Voltage Directive: EN61010-1-2010 & EN61010-2-30-2010

MID DIRECTIVE: 2014/32/EU



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