Eastron SDM230 - Wi-Fi | Quick start guide

The SDM230-WIFI is designed for single-phase residential, utility and industrial applications. Use the HomeWizard Energy app to view realtime measurements and usage over time in graphs. 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.

WARNING: *Do not install this device unless you are familiar with electrical installations and the hazards involved when working with high power equipment. Failure to observe this precaution could result in bodily injury.*

1. Installation

1.1 Verify that the incoming power is disconnected before you start the installation.

1.2 Make sure there is sufficient space required for the installation in your breaker box then click the meter onto the DIN rail.

1.3 Connect your mains Line to terminal 1 (L-in) and neutral to terminal 3 (N-in)

1.4 Connect line of the source you want to measure (solar, car charger etc) to terminal 2 (L-out) and connect the neutral of the source you want to measure to terminal 4 (N-out)

1.5 Close your breaker box and enable incoming power. The display of the SDM230 will now light up, if not verify if the SDM230 is powered and correctly connected.

Display information

Press the up/down buttons to switch between different values.

1. Total (sum)
2. Import or Export energy
3. Measured value (7 digits)
4. Power factor (PF) or Frequency (Hz)
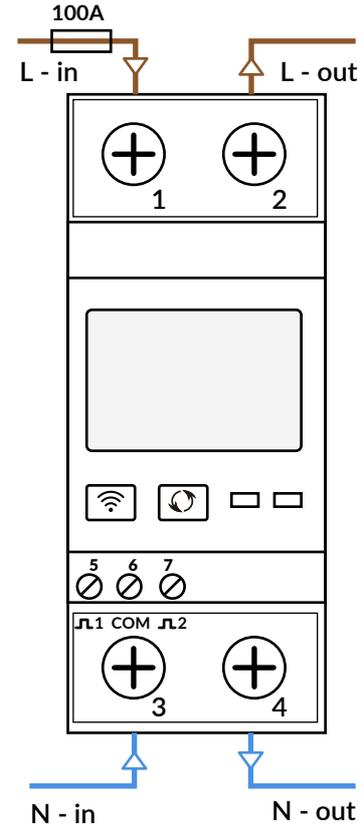5. Measurement units
6. Wi-Fi signal strength

2. App

2.1 Download the free 'HomeWizard Energy' app on the iPhone or Android app store.

2.2 Follow the steps in the app to create a HomeWizard Account

2.3 When asked to 'Start pairing mode' Press the Wifi button 📶 on the device until the screen shows 'AP'. While 'AP' is blinking you are able to setup the device. The device is succesfully setup as soon as the 'Wifi signal strength' bar is on.

2.5 The installation is now completed.

HomeWizard Energy App connected

Measures kWh, kVArh, kW, kVAr, kVA, PF, Hz, V, A.

Bi-directional measurement (solar)

Two pulse outputs

100A direct connection

Better than class 1 / B accuracy

Specification

General		Mechanic	
Voltage AC (Un)	230V	Mounting	DIN rail 35mm
Voltage Range	176~276V AC	Din rail (WxHxD)	36x99x63 mm DIN 43880
Base Current (Ib)	10A	Sealing	IP51 (Indoor)
Max. Current	100A	Material	self-extinguishing
Mini Current (Imin)	0.5A		UL94V-0
Starting Current	0.4% of Ib		
Power consumption	<2W	**Accuracy**	
Frequency	50/60Hz (±10%)	Voltage	0.5% of range max.
AC Volt. withstand	4KV for 1m	Current	0.5% of nominal
Impulse Voltage maximum	6KV-1.2uS waveform	Frequency	0.2% of mid freq.
Overcurrent maximum	30Imax for 0.01s	Power factor	1% of unity
Display	LED backlit LCD	Active power	1% of range max.
Max reading	999999.9	Reactive power	1% of range max.
		Apparent power	1% of range max.
Environment		Reactive energy	1% of range max.
Operating temperature	-25°C to +55°C	Active energy	Class 1 IEC62053-21/
Storage temperature	-40°C to +70°C		Class B EN50470-3
Reference temperature	23°C ± 2°C		
Relative humidity	0 -95% no condens	**Output**	
Altitude	Up to 2500m	Wi-Fi support	2.4Ghz b/g/n
Warm up time	10s	Wi-fi data freq.	Every second
installation catagory	CATIII	Pulse 1 imp.	2000 (default) /
Mechanical environment	M1		1000/100/10/1
Electromagnetical env.	E2	Pulse 1 output	Import (default) /export /
Degree of polution	2		total kwh or kVarh
		Pulse 2 output	2000imp/kWh import

Troubleshooting

If the device can not find your Wi-Fi it may be incompatible (5Ghz) or have insufficient signal strength.

If Wi-Fi connecting fails verify if your inserted Wi-Fi password is correct

You can reset your Wi-Fi credentials by pressing the Wi-Fi button (10s) until the screen shows '- - - -'.

It is prohibited and therefore impossible to reset the meter energy totals.