



**SDM120 A / D / DB**  
SINGLE PHASE 2 WIRE KWH METER

- 45A MAX. direct load
- One module wide
- Active energy measured
- Pulse output
- Din rail mounted



**SDM230A/D**  
SINGLE PHASE 2 WIRE KWH METER

- 100A MAX. direct load
- Two module wide
- Active energy measured
- Pulse output
- Din rail mounted

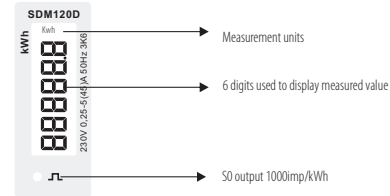
Specification	
Model	120A/120D/120DB
Display	SDM120A electromechanical register
	SDM120D LCD
	SDM120DB LCD with Backlit
Nominal voltage(Un)	120V or 230V ac
Operational voltage	80% – 120% of Un
Insulation capabilities	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV-1.2µs
Basic current (Ib)	5A
Maximum rated current (Imax)	45A
Operational current range	0.4% Ib-Imax
Over current withstand	30 Imax for 0.01s
Operational frequency range	50 / 60Hz
Internal power consumption	≤ 2W/10VA
Pulse output	1000imp/kWh
Max reading	99999.9 kWh

Performance criteria	
Operating humidity	≤ 90%
Storage humidity	≤ 95%
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

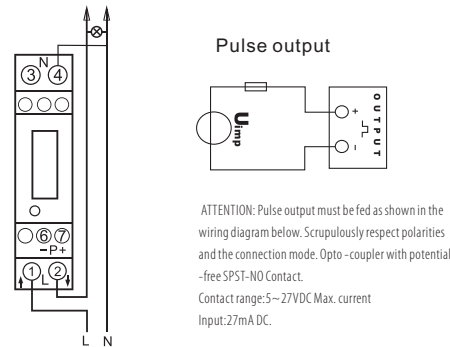


The SDM120 A/D/DB series provides a uni-direction (anti-reverse) measurement model. It would only counts the forward energy, and not counts the reverse energy. it is widely used in solar generation energy measurement.

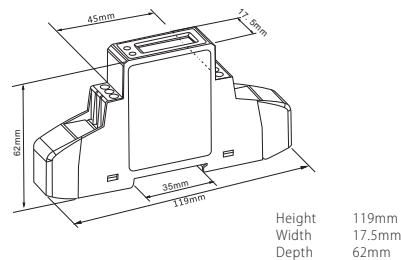
► Description



► Wiring diagrams



► Dimensions

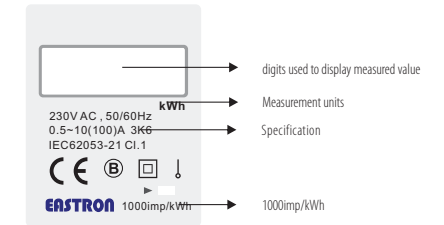


Specification	
Model	SDM230A / SDM230D
Display	SDM230A electromechanical register
	SDM230D LCD
Nominal voltage(Un)	120V or 230V ac
Operational voltage	80% – 120% of Un
Insulation capabilities	
- AC voltage withstand	4KV for 1 minute
- Impulse voltage withstand	6KV-1.2µs
Basic current (Ib)	10A
Maximum rated current (Imax)	100A
Operational current range	0.4% Ib-Imax
Over current withstand	30 Imax for 0.01s
Operational frequency range	50 or 60Hz
Internal power consumption	≤ 2W/10VA
Pulse output	1000imp/kWh
Max reading	999999.9 kWh (SDM230A) 99999.9 kWh (SDM230D)

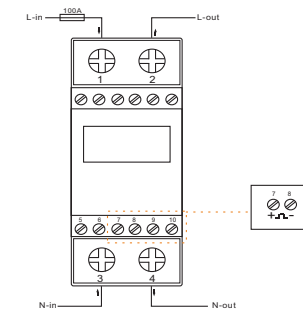
Performance criteria	
Operating humidity	≤ 90%
Storage humidity	≤ 95%
Operating temperature	-25°C - +55°C
Storage temperature	-40°C - +70°C
Reference temperature	23°C± 2°C
International standard	IEC 62053-21 / EN50470-1/3
Accuracy class	Class1/Class B
Installation category	CAT II
Mechanical environment	M1
Electromagnetic environment	E2
Degree of pollution	2
Protection against penetration of dust and water	IP51 (indoor)
Insulating encased meter of protective class	II
Altitude	up to 2000m
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

Mechanics	
Din rail dimensions	99x36x63 (WxHxD) DIN 43880
Mounting DIN rail	35mm
Sealing	IP51 (indoor)
Material	self-extinguishing UL94V-0

► Description



► Wiring diagrams



► Dimensions

