Product data sheet

Specifications

modular single phase power meter iEM2455 - 230V - 100A with communication Modbus

A9MEM2455

Main

Range	Acti9
family	Acti9 iEM2000
Product or component type	Energy meter
Device short name	iEM2455

Complementary

Poles description	1P + N
Type of measurement	Active and reactive energy Active and reactive power Apparent power Power factor Current Voltage Frequency
Metering type	Active and reactive energy
Device application	Sub billing Multi-tariff
Accuracy class	Class 1 active energy conforming to IEC 62053-21 Class 2 reactive energy conforming to IEC 62053-23 Class B active energy conforming to EN 50470-1 Class B active energy conforming to EN 50470-3
Analogue input type	Direct input
Rated current	100 A
Rated voltage	230 V
Network frequency	50 Hz 60 Hz
Frequency measurement range	45…66 Hz
Technology type	Electronic
Display type	LCD display
Sampling rate	32 samples/cycle
Measurement current	0.25…100 A
Display digits	7
Maximum value measured	99999.99 kWh 999999.9 kWh
Information displayed	Tariff (2)
Communication port protocol	Modbus RTU at 1200...38400 bauds even/odd or none
Communication port support	Screw terminals: RS485

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Local signalling	Red LED: metering and activity 10000, 2000, 1000, 100, 10, 1, 0.1 or 0.01 imp/kWh
Impulse duration	5...32 ms
[Us] rated supply voltage	195...253 V AC 50 Hz
Maximum power consumption in VA	10 VA at 240 V AC
Maximum power consumption in W	1 W per phase
[Uimp] rated impulse withstand voltage	6 kV 1.2/50 µs
Mounting mode	Clip-on
Mounting support	DIN rail
Connections - terminals	Power circuit: screw clamp terminals (bottom) 25 mm² cable(s) Communication: screw clamp terminals (top) 2.5 mm² cable(s)
Standards	IEC 62052-11 IEC 62053-21 IEC 62053-23 IEC 62052-31
Product certifications	MID conforming to EN 50470-1 MID conforming to EN 50470-3 CE

Environment

IP degree of protection	IP51 front panel: conforming to IEC 60529 IP20 casing:
Pollution degree	2
Ambient air temperature for operation	-40…70 °C
Ambient air temperature for storage	-40…80 °C
Operating altitude	<= 2000 m
Relative humidity	0…75 % operation 0…95 % storage
Colour	White
9 mm pitches	4
Width	35.8 mm
Height	96.7 mm
Depth	63 mm

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.600 cm
Package 1 Width	4.000 cm
Package 1 Length	10.000 cm
Package 1 Weight	191.200 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	7.700 cm
Package 2 Width	11.000 cm

Package 2 Length	22.000 cm
Package 2 Weight	1.001 kg
Unit Type of Package 3	S03
Number of Units in Package 3	30
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	6.136 kg

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Total lifecycle Carbon footprint	**14 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**6 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.5 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**7 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.5 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Free of Substances of Very High Concern above the threshold

Use Longer

Lifetime extension

Repair	**No**

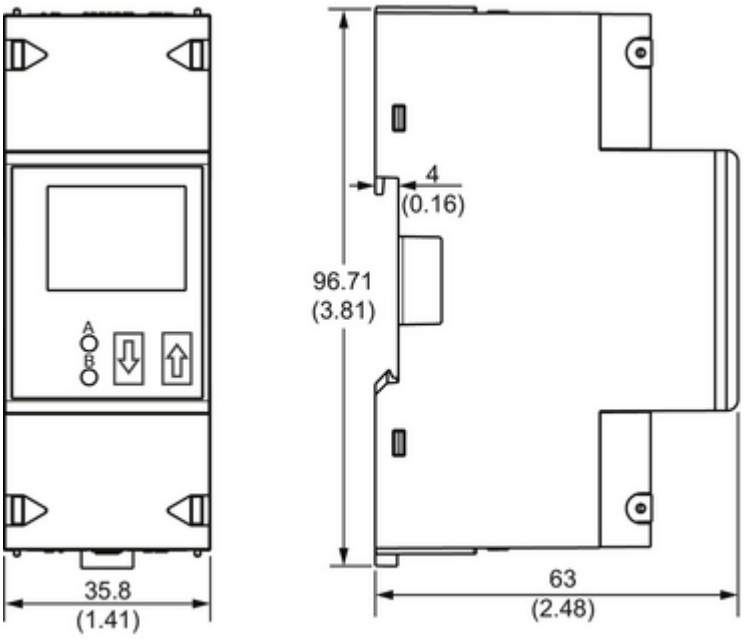
Use Again

Repack and remanufacture

Recyclability potential, in %	**32**
End of life manual availability	End of Life Information
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Technical Illustration

Dimensions



Technical Illustration

Assembly's dimensions