

# Product datasheet

Specifications



## modular single phase power meter iEM2050 - 230V - 45A with comm Modbus

A9MEM2050

Price: 189.00 USD

### Main

Range	Acti9
Family	Acti9 iEM2000
Device Short Name	iEM2050
Product Or Component Type	Energy meter

### Complementary

Poles Description	1P + N
Type Of Measurement	Active and reactive energy Active and reactive power Power factor Current Voltage Frequency Apparent power
Metering Type	Active, reactive, apparent energy (signed, four quadrant)
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
Input Type	Direct input
Maximum Current [Imax]	45 A
[Ib] Basic Current	5 A
Rated Current	45 A
Rated Voltage	230 V - 15...10 %
Network Frequency	50 Hz
Frequency Measurement Range	45...55 Hz
Technology Type	Electronic
Display Type	LCD display
Sampling Rate	32 samples/cycle
Measurement Current	0.25...45 A
Display Digits	6
Maximum Value Measured	9999.99 kWh 99999.9 kWh
Tariff Counter	Tariff (2)
Communication Port Protocol	Modbus RTU at 1200...9600 bit/s even/odd or none
Communication Port Support	Screw terminals: RS485

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

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 0.01, 0.1, 1, 10, 100, 1000, 2000 or 10000 p/kWh
Digital Inputs	0
Digital Outputs	1 pulse energy monitoring:
Impulse Duration	11.2...32 ms
Supply Voltage	195...253 V AC 50 Hz
Maximum Power Consumption In Va	10 VA at 240 V AC
Maximum Power Consumption In W	2 W
[Uimp] Rated Impulse Withstand Voltage	6 kV 1.2/50 µs
Mounting Mode	Clip-on
Mounting Support	DIN rail
Connections - Terminals	Power circuit: tunnel type terminals (bottom) 1 8...10 mm² cable(s) Power circuit: tunnel type terminals (top) 1 8...10 mm² cable(s) Pulse output: screw clamp terminals (top) 1 2.5 mm² cable(s) Communication: screw clamp terminals (bottom) 1 2.5 mm² cable(s)
Tightening Torque	Power circuit: 0.35 N.m flat screwdriver 2.2 mm Pulse output: 0.1 N.m flat screwdriver 1.3 mm Communication: 0.1 N.m flat screwdriver 1.3 mm
Wire Stripping Length	Power circuit: 7.5 mm Pulse output: 7 mm Communication: 7 mm
Standards	IEC 62053-21 IEC 62053-23
Product Certifications	CE

## Environment

Ip Degree Of Protection	IP51 front panel: conforming to IEC 60529 IP20 casing:
Ambient Air Temperature For Operation	-25...55 °C
Ambient Air Temperature For Storage	-30...70 °C
Operating Altitude	< 2000 m
Relative Humidity	0...75 % at 55 °C
Colour	White
9 Mm Pitches	2
Width	17.5 mm
Height	90 mm
Depth	63 mm

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	6.800 cm
Package 1 Width	2.000 cm
Package 1 Length	10.000 cm
Package 1 Weight	86.000 g
Unit Type Of Package 2	BB1

Number Of Units In Package 2	10
Package 2 Height	7.800 cm
Package 2 Width	11.000 cm
Package 2 Length	22.000 cm
Package 2 Weight	912.000 g
Unit Type Of Package 3	S03
Number Of Units In Package 3	60
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	6.555 kg

## Sustainability




**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)

## Well-being performance

 Reach Free Of Svhc	
 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
<b>Reach Regulation</b>	<a href="#">REACH Declaration</a>
<b>Eu Rohs Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>China Rohs Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Weee</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins