Product data sheet

Specifications



iEM3455 energy meter - Modbus - 1 DI - 1 DO - multi-tariff - LVCT

A9MEM3455

Product availability: Stock - Normally stocked in distribution facility

Main

Range	Acti9
range of product	Acti9 iEM3000
Product or Component Type	Energy meter
Device short name	iEM3455
Market segment	Buildings small building cost management: billing: main incomer Buildings small building cost management: billing: sub feeder Buildings small building cost management: billing: panelboard Buildings medium building cost management: billing: main incomer Buildings medium building cost management: billing: sub feeder Buildings medium building cost management: billing: panelboard Buildings large building cost management: billing: main incomer Buildings large building cost management: billing: sub feeder Buildings large building cost management: billing: panelboard Buildings multi-site cost management: billing: main incomer Buildings multi-site cost management: billing: sub feeder Buildings multi-site cost management: billing: panelboard Data center cost management: billing Healthcare cost management: billing Industry cost management: billing Buildings small building cost management: cost allocation: main incomer Buildings small building cost management: cost allocation: sub feeder Buildings small building cost management: cost allocation: panelboard Buildings medium building cost management: cost allocation: main incomer Buildings medium building cost management: cost allocation: sub feeder Buildings medium building cost management: cost allocation: panelboard Buildings large building cost management: cost allocation: main incomer Buildings large building cost management: cost allocation: sub feeder Buildings large building cost management: cost allocation: panelboard Buildings multi-site cost management: cost allocation: main incomer Buildings multi-site cost management: cost allocation: sub feeder Buildings multi-site cost management: cost allocation: panelboard Data center cost management: cost allocation Healthcare cost management: cost allocation Industry cost management: cost allocation

Complementary

Poles description	3P + N 1P + N 3P
Type of measurement	Active and reactive energy Active and reactive power Current Voltage
Metering type	Active, reactive, apparent energy (signed, four quadrant)
Device Application	Sub billing Multi-tariff Partial meter
Accuracy class	Class 0.5S active energy IEC 62053-22 Class 0.5S active energy ANSI C12.20
input type	Low voltage current transformer 0.333 V or 1 V

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Rated voltage	100…277 V +/- 20 % 173…480 V +/- 20 %
Network Frequency	60 Hz 50 Hz
Technology Type	Electronic
Display Type	LCD display
Sampling rate	32 samples/cycle
Measurement current	1…32767000 mA
Maximum value measured	99999999.9 kWh 99999999 MWh
tariff input	Tariff 4)
Communication port protocol	Modbus RTU 9.6, 19.2 and 38.4 kbauds even/odd or none
Communication port support	Screw terminal block RS485
Local signalling	Green indicator light power ON Yellow flashing LED accuracy checking alarm overload Yellow indicator light communications are active on the Modbus port (Modbus)
Number of inputs	1 digital 0...5 V/11...40 V 24 V DC
Number of Outputs	1 digital (static)
Output voltage	5...40 V DC@50 mA
Mounting Mode	Clip-on
Mounting Support	DIN rail
Connections - terminals	Current circuit screw terminals 0.009 in² (6 mm²) Voltage circuit screw terminals 0.004 in² (2.5 mm²) Input/output circuit screw terminals 0.002 in² (1.5 mm²) Communication screw terminals 0.004 in² (2.5 mm²)
Tightening torque	Input/output circuit: 4.4 lbf.in (0.5 N.m) Philips screwdriver Voltage circuit: 4.4 lbf.in (0.5 N.m) Philips screwdriver Current circuit: 7.08 lbf.in (0.8 N.m) pozidriv screwdriver Communication: 4.4 lbf.in (0.5 N.m) Philips screwdriver
Wire stripping length	Input/output circuit: 0.2 in (6 mm) Voltage circuit: 0.3 in (8 mm) Current circuit: 0.3 in (8 mm) Communication: 0.3 in (7 mm)
Standards	BS EN 61326-1 IEC 61326-1 EN 61326-1 BS EN 61010-1:2010 EN 61010-1:2010 IEC 61010-1:2010 UL 61010-1:2010 BS EN 61010-2-30 IEC 61010-2-30 EN 61010-2-30 UL 61010-2-30 ANSI C12.20
Product certifications	CE IEC 61010-1 safety) CE EN 61557-12 power monitor) CE EN/IEC 61326-1 EMC) UKCA BS EN 61010-1 safety) UKCA BS EN 61557-12 power monitor) UKCA BS EN 61326-1 EMC) CULus UL 61010-1 safety) CULus EN 61010-1 safety) KZ RCM
Compatibility code	IEM3455

Environment

IP degree of protection	IP40 front panel: conforming to IEC 60529 IP20 body: conforming to IEC 60529
IK degree of protection	IK08
Pollution degree	2
Relative humidity	5…95 % 97 °F (36 °C)
Ambient air temperature for operation	-13…158 °F (-25…70 °C) - IEC
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Operating altitude	< 9842.52 ft (3000 m)
Color	White
9 mm pitches	10
Width	3.5 in (90 mm)
Height	3.4 in (87 mm)
Depth	2.7 in (69 mm)

Ordering and shipping details

Category	US10PL109786
Discount Schedule	0PL1
GTIN	3606480845222
Returnability	Yes
Country of origin	CN

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	3.465 in (8.800 cm)
Package 1 Width	3.819 in (9.700 cm)
Package 1 Length	4.173 in (10.600 cm)
Package weight(Lbs)	11.499 oz (326.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	30
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	24.817 lb(US) (11.257 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	31.496 in (80.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	221.265 lb(US) (100.364 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	**73 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**13 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.7 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**58 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 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**
SCIP Number	**Bf9fffe5-b43e-4345-8e63-000bf5fa7226**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
California proposition 65	**WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**5**
Circularity Profile	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

User interface / product ON

