# Product data sheet
## Characteristics

# A9MEM3155
## iEM3155 energy meter - 63 A - Modbus - 1 digital I - 1 digital O - multi-tariff - MID



## Main

| | |
|---|---|
| Range | Acti9 |
| Product name | Acti9 iEM3000 |
| Product or component type | Energy meter |
| Device short name | iEM3155 |
| Market segment | Buildings small building cost management: billing: main incomer<br>Buildings small building cost management: billing: sub feeder<br>Buildings small building cost management: billing: panelboard<br>Buildings medium building cost management: billing: main incomer<br>Buildings medium building cost management: billing: sub feeder<br>Buildings medium building cost management: billing: panelboard<br>Buildings large building cost management: billing: main incomer<br>Buildings large building cost management: billing: sub feeder<br>Buildings large building cost management: billing: panelboard<br>Buildings multi-site cost management: billing: main incomer<br>Buildings multi-site cost management: billing: sub feeder<br>Buildings multi-site cost management: billing: panelboard<br>Data center cost management: billing<br>Healthcare cost management: billing<br>Industry cost management: billing<br>Buildings small building cost management: cost allocation: main incomer<br>Buildings small building cost management: cost allocation: sub feeder<br>Buildings small building cost management: cost allocation: panelboard<br>Buildings medium building cost management: cost allocation: main incomer<br>Buildings medium building cost management: cost allocation: sub feeder<br>Buildings medium building cost management: cost allocation: panelboard<br>Buildings large building cost management: cost allocation: main incomer<br>Buildings large building cost management: cost allocation: sub feeder<br>Buildings large building cost management: cost allocation: panelboard<br>Buildings multi-site cost management: cost allocation: main incomer<br>Buildings multi-site cost management: cost allocation: sub feeder<br>Buildings multi-site cost management: cost allocation: panelboard<br>Data center cost management: cost allocation<br>Healthcare cost management: cost allocation<br>Industry cost management: cost allocation |

## Complementary

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|---|---|
| Poles description | 3P + N<br>1P + N<br>3P |
| Type of measurement | Active and reactive energy<br>Active and reactive power<br>Current<br>Voltage |
| Metering type | Active, reactive, apparent energy (signed, four quadrant) |
| Device application | Multi-tariff<br>Sub billing<br>Partial meter |
| Accuracy class | Class 1 active energy conforming to IEC 62053-21<br>Class 1 active energy conforming to IEC 61557-12<br>Class B active energy conforming to EN 50470-3 |
| Analogue input type | Direct connection |
| [In] rated current | 63 A |
| Rated voltage | 100…277 V<br>173…480 V |
| Network frequency | 60 Hz<br>50 Hz |
| Technology type | Electronic |
| Display type | LCD display |
| Sampling rate | 32 samples/cycle |
| Measurement current | 0…63 A |
| Maximum value measured | 99999999.9 kWh |
| Information displayed | Tariff (4) |
| Communication port protocol | Modbus RTU at 9.6, 19.2 and 38.4 kbauds even/odd or none, insulation 4000 V |
| Communication port support | Screw terminal block: RS485 |

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|---|---|
| Local signalling | Green indicator light: power ON<br>Yellow flashing LED: accuracy checking<br>Alarm: overload<br>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 | Screw terminals 16 mm² cable(s) |
| Overvoltage category | III |
| Standards | BS EN 61557-12:2021<br>IEC 61557-12:2021<br>EN 61557-12:2021<br>BS EN 61326-1<br>IEC 61326-1<br>EN 61326-1<br>BS EN 62052-11:2020<br>IEC 62052-11:2020<br>EN 62052-11:2020<br>BS EN 62053-21<br>IEC 62053-21<br>EN 62053-21<br>BS EN 62052-23<br>IEC 62053-23:2020<br>EN 62052-23<br>BS EN 62052-31:2015<br>IEC 62052-31:2015<br>EN 62052-31:2015<br>BS EN 61010-1:2010<br>EN 61010-1:2010<br>IEC 61010-1:2010<br>UL 61010-1:2010<br>BS EN 61010-2-30<br>IEC 61010-2-30<br>EN 61010-2-30<br>UL 61010-2-30<br>BS EN 50470-3<br>EN 50470-3<br>BS EN 50470-1<br>EN 50470-1<br>ANSI C12.16 |
| Product certifications | CE conforming to IEC 61010-1 (safety)<br>CE conforming to EN 61557-12 (power monitor)<br>CE conforming to EN/IEC 61326-1 (EMC)<br>UKCA conforming to BS EN 61010-1 (safety)<br>UKCA conforming to BS EN 61557-12 (power monitor)<br>UKCA conforming to BS EN 61326-1 (EMC)<br>CULus conforming to UL 61010-1 (safety)<br>CULus conforming to EN 61010-1 (safety)<br>EAC conforming to EN 50470-3 (sub-meter)<br>RCM conforming to EN 62052 (sub-meter)<br>KZ conforming to EN 50470-3 (sub-meter)<br>METAS conforming to EN 50470-1 (sub-meter)<br>MID conforming to EN 50470-3 (sub-meter)<br>MID conforming to EN 50470-1 (sub-meter)<br>NMI conforming to NMI M 6-1 |
| Market segment | Small commercial<br>Residential |
| Compatibility code | IEM3155 |

## Environment

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|---|---|
| IP degree of protection | IP40 front panel: conforming to IEC 60529<br>IP20 body: conforming to IEC 60529 |
| Pollution degree | 2 |
| Relative humidity | 5…95 % at 50 °C |
| Ambient air temperature for operation | -25…55 °C - MID[RETURN]-25…70 °C - IEC[RETURN]-25…60 °C - IEC |
| Ambient air temperature for storage | -40…85 °C |
| Operating altitude | < 3000 m |
| Colour | White |
| 9 mm pitches | 10 |

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|---|---|
| Width | 90 Mm |
| Height | 95 Mm |
| Depth | 69 Mm |

## Packing Units

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|---|---|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 8.500 Cm |
| Package 1 Width | 9.500 Cm |
| Package 1 Length | 10.500 Cm |
| Package 1 Weight | 460.400 G |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 30 |
| Package 2 Height | 30.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 14.212 Kg |

## Offer Sustainability

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|---|---|
| Recyclability potential, in % | 20 |
| Total lifecycle Carbon footprint | 63 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3] | 13.86735206017985 |
| Carbon footprint of the manufacturing phase [A1 to A3] | 14 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4] | 1.083627328018327 |
| Carbon footprint of the distribution phase [A4] | 1 kg CO2 eq. |
| Carbon footprint of the installation phase [A5] | 0.01298998970312057 |
| Carbon footprint of the installation phase [A5] | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 47.49835981254569 |
| Carbon footprint of the use phase [B2, B3, B4, B6] | 47 kg CO2 eq. |
| Mercury free | Yes |
| Sustainable packaging | No |
| Carbon footprint of the end-of-life phase [C1 to C4] | 0.9505010146804609 |
| Carbon footprint of the end-of-life phase [C1 to C4] | 1 kg CO2 eq. |
| Environmental Disclosure | Product Environmental Profile |
| Total lifecycle Carbon footprint | 63 |
| Packaging made with recycled cardboard | No |
| Packaging without single use plastic | No |
| SCIP Number | Ac5c87cb-7cc2-4c71-90bc-47e5bdbaf2db |
| REACh Regulation | Reference contains Substances of Very High Concern above the threshold |
| EU RoHS Directive | Compliant By Exemption |
| Halogen-free status | Halogen free plastic parts product |
| 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 |

## Contractual warranty

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|---|---|
| Warranty (in months) | 18 |

Product Life Status : Commercialised