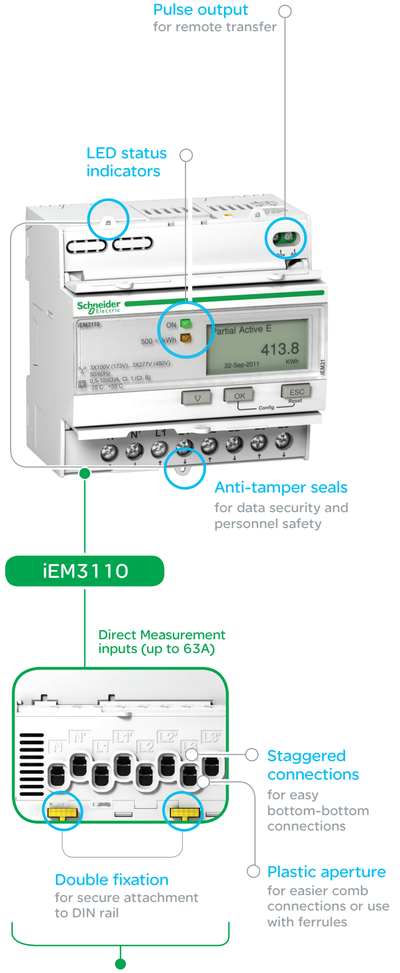
# iEM3000 series energy meters

# Meet your customers' demanding expectations with the right meter




All iEM3100 models are direct connect up to 63 A

## Simple & smart

### Order with ease and minimise stock

- 23 references to cover most installation requirements
- Each meter supports 1P, 2P, 3P, and 3P+N wiring connections

### Save installation time, costs and space

- Bottom-to-bottom, direct connection up to 63 A (iEM3100 models) and 125 A (iEM3300 models)
- 1 A/ 5A CTs and PTs for connections (iEM3200 models)
- Plastic aperture shaped to assist comb connection and fixation (iEM3100, iEM3300 models)
- Large connections with plastic aperture accommodate ferrules and increase user protection by limiting access conducted parts once the meter is installed (iEM3100 , iEM3300 models)
- Separation of power (bottom) and communication (top) connections reduces risk of incorrect wiring
- Measure three single-phase loads with an iEM3000 and the energy consumption information for each load is available through communications (iEM3100, iEM3300 model with communication port)

### Commission safely with ease

- All terminals are finger proof (IP20), so installers can not touch any live terminals
- LED indicators provide visual status of meters (i.e. energised and communicating)

### Use with confidence

- Graphic display makes it easy to accurately read the descriptions of displayed values
- Easy navigation for setup and display

The iEM3000 series energy meters are a cost-attractive, feature-rich energy-metering offer ideal for helping your customers' installations become more energy efficient while reducing your own installation and commissioning costs thanks to their efficient design. The meters support a variety of protocols (Modbus, LON, M-bus, BACnet) that allow them to integrate seamlessly into your customers' existing networks and bring simple energy management applications to any building. The offer ranges from very basic kWh meters for the most basic applications to MID-compliant meters for billing applications to advanced energy meters able to measure a variety of electrical parameters. Whether you require a simple kWh meter or a full-featured, multi-tariff energy meter, there is an iEM3000 series meter that is the best fit for your panel and your customer's application.

## Reliable & accurate

### Accurate information

- MID approved on certain models
- Accuracy class 1.0 and 0.5S (IEC 62053-21/22) for active energy metering
- Compliance to regulations EN50470-1/3, IEC 61557-12, IEC 62053-21/22, IEC 62053-23

### Data integrity

- Anti-tamper sealing parts prohibit accessibility to all metering connections (voltage, current, DI/DO)
- Save date/time of last reset to verify start of measurement campaigns and know if clock was altered

### Robust design

- Double fixation offers greater stability, allows installation vertically or in high-vibration environments
- Well protected for normal use: IP40 on front face, IP20 on terminals

### BENEFITS OF ENERGY MANAGEMENT APPLICATIONS

**Optimise energy consumption & enable energy efficient practices**

- Collect and analyse all consumption data (WAGES) from each area for each type of load or circuit
- Gain an accurate understanding of business expenses by allocating all energy-related costs
- Implement actions designed to reduce energy consumption and promote energy efficiency

**Monitor the energy consumption of tenants or customers and establish accurate invoices**

- Allow building owners to bill tenants for individual measured utility usage.
- Give accurate and achievable objectives for energy saving
- Drive energy-efficient behaviour

Extensive protocol support with Modbus, M-bus, BACnet, LON

MID certified for billing applications

## More than just kWh

### Measurement parameters

- Total and partial kWh to discover consumption behaviour
- Four-quadrant metering to differentiate energy consumption
  - Target green technologies (delivered/received)
  - Help reduce utility penalties (active/reactive)
- Additional parameters (P, Q, S, V, PF, F) to help monitor network balance and overload behaviour

### Multiple tariffs

- Save up to 4 different time slots to manage multiple tariffs (peak/off-peak, weekday/weekend)
- Control tariffs via digital inputs, internal clock or communications

### Programmable digital inputs

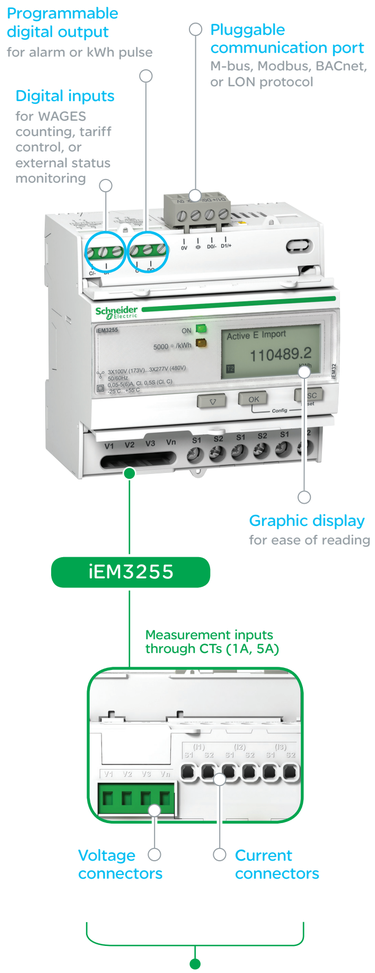
- Use the meter as a pulse counter for any energy meter with a pulse output (WAGES collection)
- Manage double-source applications (e.g., sources from grid and local generator and fuel generator)
- Monitor circuit breaker status
- Control up to 4 tariffs from external digital signals

### Programmable digital outputs

- Use to trip a light or sound an alarm
- Configure as a pulse output

### Smart alarm

- kW overload alarm helps reduce billing penalties, optimise energy procurement and secure the network




All iEM3200 models connect through 1A or 5A current transformers

# iEM3000 series function guide

| Function Guide | | IEM3000 series energy meters | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | iEM3100<br>iEM3200<br>iEM3300 | iEM3110<br>iEM3210<br>iEM3310 | iEM3115<br>iEM3215 | iEM3135<br>iEM3235<br>iEM3335 | iEM3150<br>iEM3250<br>iEM3350 | iEM3155<br>iEM3255<br>iEM3355 | iEM3165<br>iEM3265<br>iEM3365 | iEM3175<br>iEM3275<br>iEM3375 |
| Self powered | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Width (18mm module) | | 5/5/7 | 5/5/7 | 5/5 | 5/5/7 | 5/5/7 | 5/5/7 | 5/5/7 | 5/5/7 |
| Direct measurement (up to) | | 63A/-/125A | 63A/-/125A | 63A/- | 63A/-/125A | 63A/-/125A | 63A/-/125A | 63A/-/125A | 63A/-/125A |
| Measurement input through CTs (1A, 5A) | | - /■/- | - /■/- | - /■ | - /■/- | - /■/- | - /■/- | - /■/- | - /■/- |
| Measurement input through VTs | | | | | - /■/- | - /■/- | - /■/- | - /■/- | - /■/- |
| Active Energy measurements class | | 1/0.5S/1 | 1/0.5S/1 | 1/0.5S | 1/0.5S/1 | 1/0.5S/1 | 1/0.5S/1 | 1/0.5S/1 | 1/0.5S/1 |
| Four Quadrant Energy measurement | | | | | ■ | | ■ | ■ | ■ |
| Electrical parameter measurements (I, V, P,...) | | | | | ■ | ■ | ■ | ■ | ■ |
| Multi-tariff (internal clock) | | | | 4 | 4 | | 4 | 4 | 4 |
| Multi-tariff (external control) | | | | 4 | 2 | | 2 | 2 | 2 |
| Measurement display (no. of line) | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Digital inputs | Programmable (Tariff control or WAGES input) | | | | 1 | | 1 | 1 | 1 |
| | Tariff control only | | | 2 | | | | | |
| Digital outputs | Programmable (Kwh pulse or KW overload alarm) | | | | 1 | | 1 | 1 | |
| | Kwh pulse only | | 1 | | | | | | |
| Communication protocols | M-bus | | | | ■ | | | | |
| | Modbus | | | | | ■ | ■ | | |
| | BACnet | | | | | | | ■ | |
| | Lon | | | | | | | | ■ |
| MID (legal metrology certification) | | | ■ | ■ | ■ | | ■ | ■ | ■ |
| Ordering references | | A9MEM3100 | A9MEM3110 | A9MEM3115 | A9MEM3135 | A9MEM3150 | A9MEM3155 | A9MEM3165 | A9MEM3175 |
| | | A9MEM3200 | A9MEM3210 | A9MEM3215 | A9MEM3235 | A9MEM3250 | A9MEM3255 | A9MEM3265 | A9MEM3275 |
| | | A9MEM3300 | A9MEM3310 | | A9MEM3335 | A9MEM3350 | A9MEM3355 | A9MEM3365 | A9MEM3375 |

How to read table: If a cell contains a single value, that value applies to all meter models identified in the header cell(s). For cells with multiple values, the values correspond from left to right with the meter models listed from top to bottom for each associated header cell. For example, a cell with "A / B / C" means A for iEM31xx models, B for iEM32xx models, and C for iEM33xx models

# iEM3000 series energy meters are 100% compatible with the Acti 9 system

## Smart Link


IEM3000 series energy meters are fully compatible with the Acti 9 modular system, gathering device status and energy consumption data so that your customers can effectively manage the behaviour of their electrical distribution system.

**Make the most of your energy℠**


Schneider Electric Ltd

United Kingdom
Stafford Park 5,
Telford
Shropshire
TF3 3BL
Tel: 0870 608 8 608
Fax: 0870 608 8 606
www.schneider-electric.com/uk

Ireland
Head office,
Block a
Maynooth Business Campus
Maynooth, Co. Kildare
Tel: (01) 601 2200
Fax: (01) 601 2201
www.schneider-electric.com/ie





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# Energy metering integration made simple

## > Energy Meter iEM3000 series

Energy Efficiency

The efficiency you deserve