iEM3000 series

Versatile energy meters for demanding applications

iEM3455

The economical iEM3000 energy meters are ideal for helping facilities become more energy efficient. These feature-rich meters reduce installation and commissioning costs thanks to their efficient design and include native support for a variety of protocols for seamless integration into networks.

Choose from models supporting a variety of current-sensing methods, including standard current transformers, low-voltage CTs, and Rogowski coils. There are also direct connect models with internal current sensors that save installation time.

The compact size is ideal for new and retrofit installations. Whether metering for energy awareness, billing, or advanced energy programs requiring full-featured, multi-tariff energy meters, there is an iEM3000 meter that fits the application.

Measurement parameters

- Total and partial kWh shows consumption behavior
- Four-quadrant metering differentiates energy consumption
- Target green technologies (delivered/received)
- Reduce utility penalties (active/reactive)
- Additional parameters (P, Q, S, 3xI, V, PF, F) to monitor network balance and overload behavior

Multiple tariffs

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

Digital inputs

- Use the meter as a pulse counter for another meter (WAGES monitoring)
- Manage double-source applications (e.g., utility main plus on-site generator)
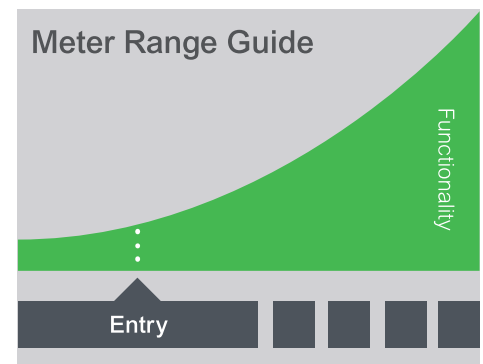- Monitor circuit breaker status or cabinet door opening

Digital outputs

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

Smart alarm

- kW overload alarm helps prevent utility demand charges

A complete range of energy meters

- Multiple protocols: Modbus, BACnet, LON, M-Bus
- Multiple current sensor connection options: Direct, 1A/5A CT, 0.333V/1.0V CT, and Rogowski coil

Meter Range Guide

Functionality

Entry

- Simple energy and power measurement
- Submetering for cost allocation and analysis

Key:
E	Entry	I	Intermediate
M	Multi-Circuit	A	Advanced
B	Basic		

iEM3000 series selection guide

Features and Options	iEM3000 series three-phase meters						
Current Input / Accuracy							
63A Direct / Class 1	iEM3100	iEM3110	iEM3135	iEM3150	iEM3155	iEM3165	iEM3175
1A or 5A CT / Class 0.5S	iEM3200	iEM3210	iEM3235	iEM3250	iEM3255	iEM3265	iEM3275
125A Direct / Class 1	iEM3300	iEM3310	iEM3335	iEM3350	iEM3355	iEM3365	iEM3375
0.333V or 1.0V LVCT / Class 0.5S					iEM3455	iEM3465	
Rogowski coil / Class 0.5S					iEM3555	iEM3565	
Protocol							
M-Bus			■				
Modbus				■	■		
BACnet						■	
LonWorks							■
Measurement							
MID compliant		■	■		■	■	■
4 quadrant energy			■		■	■	■
Demand					*■	*■	
Peak Demand					*■	*■	
Multi tariff							
Internal clock			4		4	4	4
External control			2		2	2	2
Digital I/O							
Number of inputs/outputs		-/1	1/1		1/1	1/1	1/1

*Available on iEM3455, iEM3465, iEM3555, iEM3565 models only

Notes:

1. For meter part number replace "i" in model name with "A9M". (Example: iEM3150 = A9MEM3150)
2. DIN rail housing size is 18mm x 5 width. (iEM33xx is 18mm x 7 width)
3. Digital input is selectable for Tariff control or WAGES
4. Digital output is selectable for kWh pulse or kW alarm. (iEM3x10 is kWh pulse only)

Accurate information

- 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

Demand* – Fixed Block or Sliding Block modes, selectable interval

- Power Demand – Active, Reactive, Apparent
- Current demand - Per phase, neutral, and average
  (available through communications)

Peak Demand* – For all demand parameters, maintained in non-volatile memory

- Peak value
- Date and time of peak since last reset
- Parameters resettable from front panel and communications

  *Available on iEM3455, iEM3465, iEM3555, iEM3565 models only

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