

# Compact power and energy metering solution



## An ideal solution for monitoring and metering applications

### Overview

Eaton's Pow-R-Line® IQ 35M is a compact, affordable energy meter that combines exceptional performance and easy installation to deliver a cost-effective solution for energy and power monitoring applications, as well as submetering applications.

Because of its compact size, the Pow-R-Line IQ 35M is an ideal solution for panelboard applications to monitor the main power coming into the panelboard. Use the Pow-R-Line IQ 35M for applications in lighting appliance and small power distribution panelboards up to 400 amperes.

With the rapidly changing emphasis on LEED® designs, the Pow-R-Line IQ 35M helps you to meet the Measurement and Verification points required by LEED and the U.S. Green Building Council.

All models include pulse output and phase loss alarms for maximum versatility. The Modbus® output option offers added flexibility for configuration, communication and data analysis.

### The Pow-R-Line IQ 35M allows you to:

- Verify energy bills
- Make informed load shifting and shedding decisions
- Fairly and accurately allocate energy costs to users
- Identify wasteful practices
- Decrease unnecessary usage
- Produce an energy profile
- Secure the optimum utility rate structure

### Key features

- Economical and compact watt-hour meter with demand
- Backlit LCD display for local reading
- Compatible with the Power Xpert® Gateway for remote monitoring
- Monitors:
  - Voltage, current, power factor, frequency
  - Power: real, reactive and apparent
  - Energy: real, reactive and apparent
- Optional data logging capability
- Optional serial communications (Modbus RTU)
- Revenue grade, ANSI C12.20 0.5% accuracy, IEC 62053-22 Class 0.5S
- User-enabled password protection
- On-board diagnostics

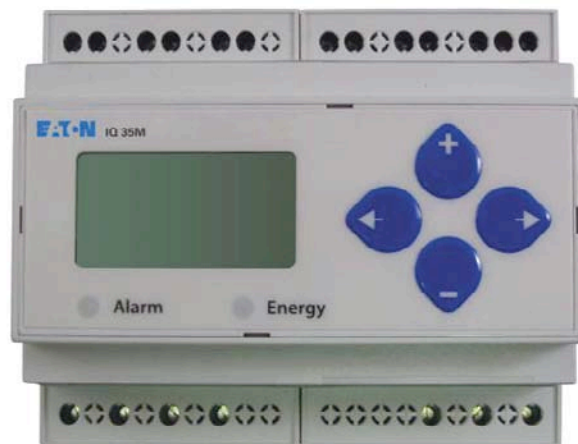
### Typical applications

- Commercial submetering
- Energy management
- Industrial monitoring
- Cost allocation



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Technical Specifications	Description
Voltage input	UL®: 90V (L-N) to 600V (L-L); CE: 90V (L-N) to 300V (L-L)
Current input	Scaling: 5A to 32,767A Input range: 0 to 0.333V or 0 to 1V (selectable)
Control power	UL: 90V (L-N) to 600V (L-L); CE: 90V (L-N) to 300V (L-L)
<b>Accuracy</b>	
Real power and energy	0.5% (ANSI C12.20, IEC 62053-22 Class 0.5S)
<b>Outputs</b>	
All models	Real energy pulse: NO static; alarm contacts: NC static
IQ 35MAx1	Reactive energy pulse 30 Vac/Vdc
IQ 35MAx2, IQ 35MAx3	RS-485 two-wire Modbus RTU
<b>Mechanical</b>	
Mounting	DIN rail or three-point screw mount
<b>Environmental</b>	
Operating temperature range	Meter: -30° to 70°C (-22° to 158°F) Display: -10° to 50°C (14° to 122°F)
Storage temperature range	Meter: -40° to 85°C (-40° to 185°F) Display: -10° to 60°C (14° to 140°F)
Humidity range	<95% RH noncondensing
<b>Data outputs</b>	
kW, kWh	Total
Current	Three-phase average, per phase
Voltage	Three-phase average, per phase line-line and line-neutral
Power	Real, reactive and apparent; three-phase total and per phase
Power factor	Three-phase average and per phase
<b>Frequency</b>	
Power demand	Most recent and peak
Demand configuration	Fixed, rolling block and external sync
Data logging (IQ 35MAx3 only)	10 configurable data buffers Configurable demand subinterval (when set at a 15-minute interval, buffers store data for 60 days)



#### Panelboard ratings

- Panelboard: UL 67 Listed
- Enclosures: UL 50 Listed
- 240 Vac, 480Y/277 Vac, 480 Vac and 125 Vdc
- Main lugs or main breaker
- Up to 200 kAIC symmetrical short-circuit current rating
- 100A, 225A and 400A bussing
- Branch devices: 15–100A

#### Panelboard features

- 18-, 30- and 42-branch circuit configurations
- Single-pole, two-pole and three-pole branch devices
- Top or bottom feed
- Surface or flush NEMA® Type 1 enclosures
- Ground bus

#### Panelboard optional features

- NEMA Type 3R enclosure
- Service entrance equipment label
- Isolated ground bus
- Through-feed lugs
- Subfeed lugs
- Pow-R-Command™ (PRC) lighting control system
- Branch padlock type lock-off
- Surge protective device (SPD)
- Door-in-door trim
- Custom enclosures

#### Customer orders and shipping

Each Pow-R-Line IQ 35M panelboard is assembled to the customer's specifications.

For more information on these panelboards, please refer to Technical Data TD02601018E, contact your nearest Eaton sales office or go to [www.eaton.com/electrical](http://www.eaton.com/electrical).

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