The value you want, the benchmark metering accuracy you need

PowerLogic PM5000 series

Industry Buildings

Make the most of your energy℠

Schneider Electric

With it's accuracy , simplicity, quality, and rich feature set making the PowerLogic™ PM5000 series meters the industry's performance benchmark for cost management applications, I'd have expected it to cost more.

More capability than you expected

Budget conscious professionals have a new benchmark for metering performance

The PowerLogic PM5000 series unites high quality and affordability in a compact meter. It is meticulously engineered to provide high-end cost management capabilities in a straightforward metering platform. This means it's both affordable and capable, while being simple to purchase, install and use. Use it to maximize operational efficiency, increase network reliability, and improve business performance.

Optimized for energy cost management

An essential combination of features, such as multiple tariffs and data logging, merges with industry-leading measurement accuracy to match the requirements of energy cost management applications, in buildings and industry. Compliant with MID, IEC 62052/53, and IEC 61557-12 metering standards, the PM5000 series meters remove any uncertainty in billing for energy costs and ensure a high level of performance that noncompliant devices cannot match.

Complying with most demanding international metering standards

IEC 61053-22 Class 0.5S / Class 0.2S

ANSI 12.20 (0.5) Class 10
(PM5500 models)

IEC 61557-12 PMD/S/K70/0.5
(PM5100 & PM5300 models)

IEC 61557-12 PMD/S/K70/0.2
(PM5500 models)

IEC 62052-11

IEC 62053-24

MID, EN50470-1/3 - Annexe B & Annexe D

CE as per IEC 61010-1 Ed.3

cULus as per UL 61010-1 Ed.3

Optimize energy use and costs across your entire

An ideal combination of features

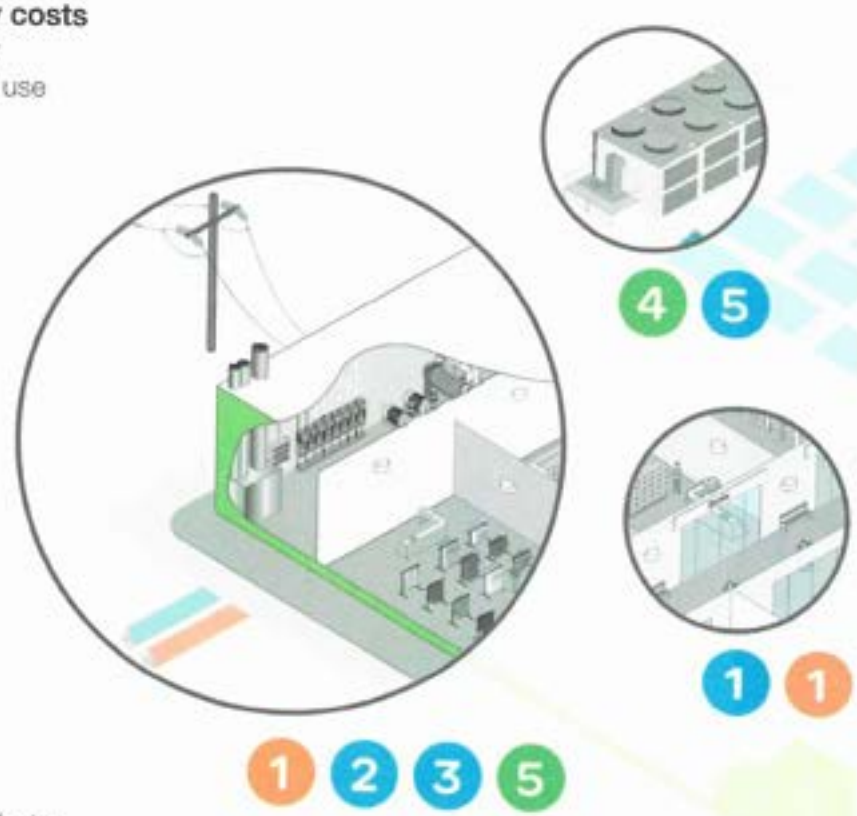
Affordable to buy and easy to choose, the highly-capable PowerLogic PM5000 series meters are designed to provide the best combination of features to match all your energy cost management needs. They provide the measurement capabilities needed to allocate energy usage, perform tenant metering and sub-billing, pinpoint energy savings, optimize equipment efficiency and utilization, and perform a high level assessment of the power quality of the electrical network.

Energy cost management

1 Identify consumption to recoup energy costs
- reduce consumption of electricity and water
- sub-bill tenants and identify process energy use
- identify savings opportunities
- Integrate other water, air, gas, electricity and steam meter data

2 Improve energy supply
- optimize energy procurement
- billing verification

3 Reduce energy bills
- reduce billing penalties and optimize energy procurement
- shed unnecessary loads
- participate in demand response and peak shaving programs



Electrical network management

4 Monitor to increase reliability
- receive fast fault alarms
- identify underperforming electrical assets
- increased productivity, comfort & safety
- increase reliability and recover from outages faster
- understand root failure causes
- increase maintenance personnel productivity

Asset management

5 Optimize asset usage to boost efficiencies
- assess operational efficiency
- optimize preventative maintenance
- avoid over building
- identify spare network capacity
- detect and mitigate power quality issues to increase equipment life

PM5500
PM5300
PM5100

organization

5

4 4

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This example architecture shows only one of many application possibilities for PM5000 series meters. Consider the level of measurement accuracy and your information requirements at each metering point in order to select the most appropriate device.

Key features and capabilities for improved metering performance

> Installation and configuration
- Easy, tool-free installation thanks to two-clip mounting and one-piece construction in a standard DIN 96 x 96 mm cutout
- Compact 72 mm depth

> Graphical display
- Back-lit, anti-glare display provides easy reading in extreme lighting conditions and viewing angles
- Intuitive menu-driven navigation, large characters, icons, and graphics offer easy access to important information in English, Spanish, French, Italian, German, Portuguese, Chinese, and Russian

> Onboard web pages (PM5500 models)
- View real-time and logged information using any browser for easy information access without specialized software
- Verify communications and easily troubleshoot issues

> Battery backed real-time clock
- Continues operation during power outages
- Time-stamped alarms and events

> Alarms
- Meters offer a combination of predefined and configurable alarms with 1 s time stamping, varies by meter model
- Each meter has an alarm log that contains the dated and time-stamped active and historical alarms
- Program alarms to trigger digital outputs or mechanical relays (select PM5300 models)

Back view

> Digital I/O
- Monitor alarms, synchronize demand with external pulse, count pulses, calculate consumption from other WAGES meters
- Use digital outputs to signal another device or software, or execute automatic actions such as control of basic equipment or alarm annunciation

Front view

> 4 current inputs (PM5500 models)

- Measuring neutral current is essential for avoiding device overload and network outage. Direct measurement is superior to calculated values since the latter are not accurate at higher harmonics.
- Calculate ground current in a 3-phase, 4-wire system to determine all the possible current values

> Data logging and internal memory

- PM5500 models: Up to 14 selectable parameters with configurable interval and duration (e.g. 6 parameters for 90 days @15 minute interval)
- PM5300 models: 2 parameters (kWh and kVAh) with configurable interval and duration for a total of 60 days @ 15 minutes

> Extended voltage range

- Direct connection up to 690 V L-L without voltage transformers for installations compliant with category III insulation level. Saves panel space by dispensing with transformers for control power or voltage inputs.

> Multiple tariffs

- Multiple tariffs offer the most flexibility with billing structures. Support up to 4 tariffs on PM5300 models or 8 tariffs on PM5500 models.
- Delivered and received real and reactive energy, apparent energy, input metering accumulated values, peak real power demand, peak reactive power demand

> Harmonics

- THD and individual harmonics to the 15th order for PM5100, 31st order for PM5300, and 63rd for PM5500

> Dual Ethernet (PM5500 models)

- Daisy chain meters together to minimize both the wiring and the need for external switches or hubs. Each meter has a single IP address.

Feature selection table

Features and Options	PM5110	PM5330	PM5340	PM5560	PM5563
Installation					
Fast installation, panel mount with integrated display	■	■	■	■	–
Fast installation, DIN rail mountable	–	–	–	–	■
Accuracy	CL 0.5S	CL 0.5S	CL 0.5S	CL 0.2S	CL 0.2S
Display					
Backlit LCD, multilingual, bar graphs, 6 lines, 4 concurrent values	■	■	■	■	■
Power and energy metering					
3-phase voltage, current, power, demand, energy, frequency, power factor	■	■	■	■	■
Multi-tariff	–	4	4	8	8
Power quality analysis					
THD, thd, TDD	■	■	■	■	■
Harmonics, individual (odd) up to	15th	31st	31st	63rd	63rd
I/Os and relays					
I/Os	1DO	2DI/2DO	2DI/2DO	4DI/2DO	4DI/2DO
Relays	0	2	2	0	0
Alarms and control					
Alarms	33	35	35	52	52
Set point response time, seconds	1	1	1	1	1
Single and multi-condition alarms	–	■	■	■	■
Boolean alarm logic	–	–	–	■	■
Communications					
Serial ports with modbus protocol	1	1	–	1	1
Ethernet port with Modbus TCP protocol	–	–	1	2**	2**
Onboard web server with web pages	–	–	–	■	■

** 2 Ethernet ports for daisy chain, one IP address.

For more information, please visit www.schneider-electric.com

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Document Number 3000BR1308

February 2014