

## Energy monitoring

**Application:** all large, non-critical industrial buildings (>1,000 kVA)

# Analyze energy data to optimize operation of your industrial buildings

“ I need a complete system to manage my water, air, gas, electricity, and steam (WAGES) consumption and reduce maintenance costs. ”

## Use ION Enterprise software to acquire energy meter and circuit breaker data for complete installation monitoring

The solution delivers the indicators, curves, and trends you need to:

- Identify potential savings
- Pinpoint investment opportunities that can help you use less energy, like lighting, heating or air treatment control systems
- Assess your installation's performance via status and fault alarms and measurements

ION Enterprise power monitoring and control software features:

- Energy metering (WAGES) and power monitoring data acquisition (voltage, current, power factor) through:
  - SEPAM, Masterpact, and Compact NSX power meters with integrated protection
  - PM, CM, and ION power meter ranges
  - Remote devices connected via the Internet, Ethernet, wireless, modem, satellite and serial connections

The software controls loads and power sources, peak rate management, and power factor correction.

Advanced data management:

- Load aggregation, multi-site meter aggregation and trending, bill verification, cost allocation and sub-billing
- Trigger on complex conditions, alarming, event logging, power quality analysis and compliance monitoring

Advanced information delivery:

- Web-enabled, local or remote preconfigured and custom reports
- Manual, scheduled or event-triggered reports via email or web

Solution

# Benefits



For the user

> **10% energy savings** through consumption tracking

> **Covers full WAGES (water, air, gas, electricity, steam) consumption**

> **Reduced energy costs** by avoiding higher utility contract fees and penalties through demand response and curtailment programs

> **Increase loads and equipment lifetimes** by detecting anomalies on the installation

> **Boost reliability of information** by gaining a comprehensive overview of all energy management data via a single system

> **Enjoy greater flexibility** with fully customizable data processing, user interfaces, reports and controls



+ **Full Modbus and OPC connectivity** to third-party meters, sensors and other equipment

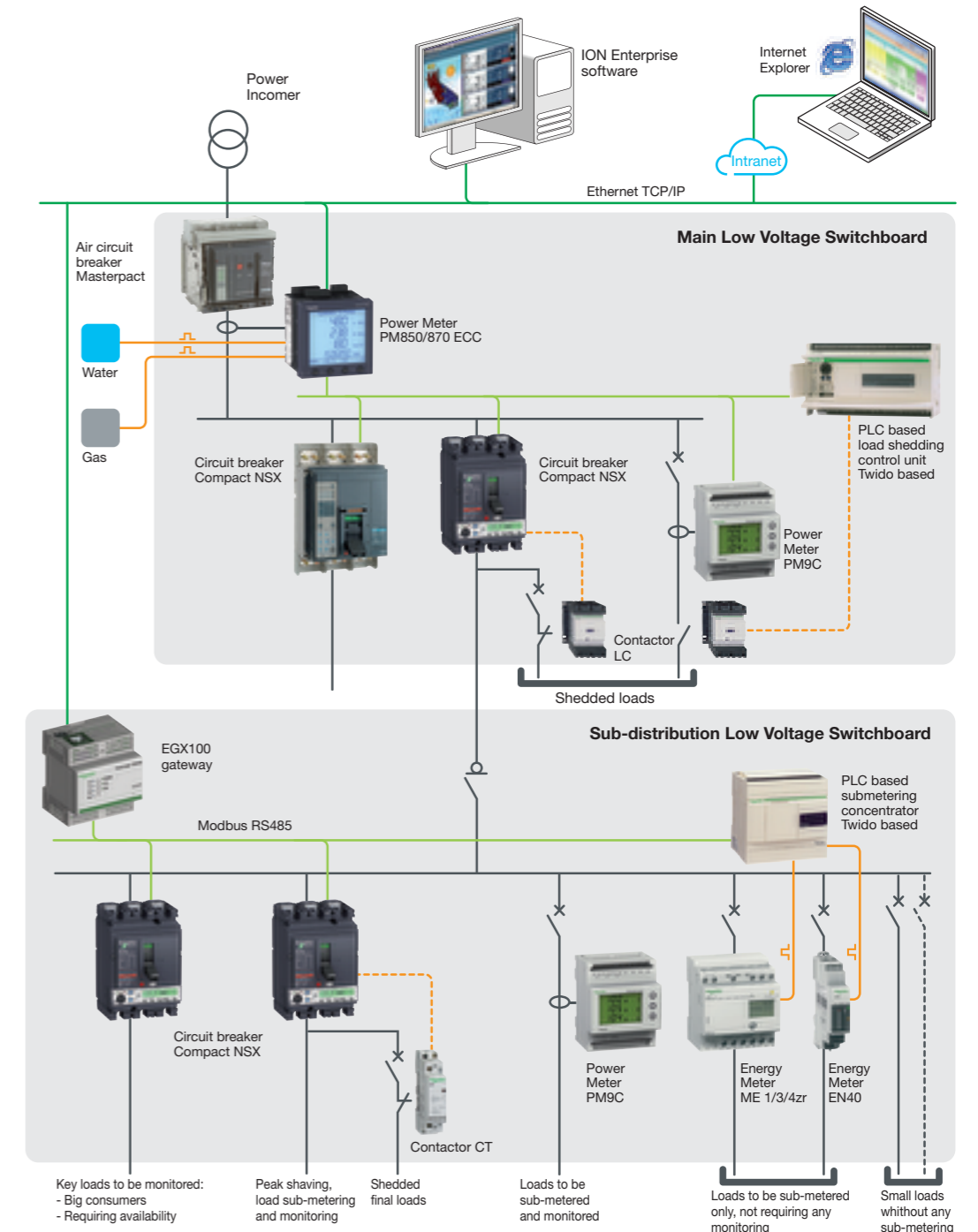
+ **High interoperability** with third-party systems, applications and services such as BAS, MES and ERP via ODBC, OPC, XML, FTP, email, CSV, PQDIF

+ **Cost-effective implementation** through preconfigured reports

+ **Optimised cost** through fully scalable hardware, software and system architecture

+ **Power meters with built-in protection** deliver switchboard instrumentation without installing dedicated power meters. Sepam, Masterpact and Compact NSX enable full monitoring across the entire power distribution architecture

- ✓ Measure
- ✓ Reduce energy consumption
- ✓ Reduce energy costs



### ION E V6.0

- Compatible with all PowerLogic ION-series meters, PowerLogic PM750 and PM710 meters
- Supports third-party meters, sensors and other equipment through Modbus protocol or OPC
- Connect to remote devices via Internet, Ethernet, wireless,

- modem, satellite, and serial connections
- Integrated metering of all utilities (water, air, gas, electricity, steam)
- Enterprise web portal access to system-wide displays
- Preconfigured and custom reports, report wizard, scheduled distribution via email or web

- Power quality analysis including compliance with international standards (IEC 61000-4-30, EN50160)

### PM 850

- Easy to install panel-mount with only two clips, or DIN rail mount with or without remote display
- Direct-connect voltage inputs, with no need for

- potential transformers (PTs) up to 600 VAC
- Intuitive navigation with self-guided, language-selectable menus
- Individual harmonic magnitudes and angles and waveform capture (PM850 and PM870)
- IEC 62053-22 class 0.5S for real energy