

Simple Energy Management solutions

Typical architectures for buildings segments

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Simple Energy Management Solutions by Schneider Electric: your path to savings

Simple, cost-effective, and easily upgradeable, Simple Energy Management Solutions are designed specifically to enable the owners and operators of small to medium-sized buildings and facilities to reduce their energy consumption, lower their energy bills, facilitate operation and maintenance, reduce their carbon footprint, and communicate specific data on progress towards environmental goals.

The solutions provide clear, detailed energy performance data in an easy-to-understand format, offer a user-friendly interface, ensure secure data transmission and storage, and are flexible enough to expand or upgrade at minimal cost. Performance can be tracked by usage load, and users can configure green dashboards to set cost-reduction targets and monitor progress.

Metering equipment tracks energy use at the source and a data transmission system sends the information to a PC, tablet or mobile device in easy-to-understand graph or table format at whatever frequency is deemed appropriate by the user, either locally or remotely.

Your energy data at a glance!

- Data aggregation for same energy or different energies converted to same units (such as gas to kWh)
- Environmental parameters like temperature, humidity, and CO₂ emission
- Dynamic data on degree days and production output
- Raw and normalized consumption data
- Energy cost data in the appropriate currency
- Monthly energy consumption as compared to target and reference period
- Energy consumption breakdown in chart format



Benefits for facility managers, property managers, and building tenants

- Save on energy costs by reducing consumption and cost per kWh
- Involve building occupants in energy-efficiency measures
- Implement measures like demand control, peak shaving, and power-factor correction
- Negotiate better utility contracts and eliminate billing errors
- Improve and reduce the cost of operations and maintenance
- Lower the carbon footprint
- Achieve compliance with energy regulations and produce data for energy-efficiency certifications
- Get advice from our energy management specialists

Benefits for property developers and owners

- Increase property value
- Facilitate resale
- Increase rental occupancy and yield
- Go green and show it by communicating specific data





A solution for every building and every budget

Schneider Electric offers two solutions designed to suit your energy management preferences and goals:

- an on-site solution that includes energy metering equipment installed at your building or facility—the building operator manages the system and data.
- a hosted solution which, once the metering equipment is installed, enables you to decide what data you need and how often. Schneider Electric takes care of the rest.

Designed for both new constructions and existing buildings, for single site and multi-site installations

When you choose a Schneider Electric Simple Energy Management Solution for your new construction project, you get the opportunity to build energy efficiency in from the start. As soon as your building is completed, you have complete energy consumption information at your fingertips.

Existing buildings already equipped with metering systems present a number of potential challenges: business requirement may not allow for prolonged interruptions during installation, or the building operator may not be willing to take on complicated, costly, and messy cabling work, for instance.

Schneider Electric's energy management solutions allow third-party equipment integration and a wireless Smart Interface Module (SIM) that enables communication with difficult-to-cable meters in difficult-to-access locations.

Simple Energy Management Solutions are suitable for all building configurations:

- Single-site either as an on-site solution or as a hosted solution managed by Schneider Electric
- Multi-site, to address enterprise-wide requirements and to compare the performance of different sites for benchmarking purposes and to identify and share best practices

Find out which solution is right for you: on site or hosted



On Site

The On-Site Energy Management solution consists of a complete architecture installed on site and independently managed by the building operator.

- The solution is on an energy management controller (iRio) which processes the data.
- Users can view data from a PC located anywhere with no additional software installation.
- Building operators manage the system, including software upgrades, and data, including backup.
- Building operators set targets themselves and pinpoint where and how to reduce energy consumption.
- Building operators can generate their own reports.



Hosted

Built on a streamlined architecture, the Remote Energy Management solution requires only the installation of simple metering equipment on site and an integrated gateway server to transfer data.

- Full-service solution that works via a communication gateway.
- Schneider Electric gathers and processes data and sends to the customer at the desired frequency and in the desired format.
- Schneider Electric analyzes the data and makes recommendations.
- Schneider Electric is responsible for data storage and backup.



Whether you are planning to equip a hotel, a bank, a school, a government building, a shopping mall or a small to medium-sized office building, the following pages are designed to help you understand how our solutions work. You will find a selection of architectures with sample dashboards and bills of materials outlining everything you need to build your installation.

- hotel
- bank
- local authorities building
- medium office

- small office
- shopping mall
- secondary school



On-Site Energy Management solution for direct access to your data, your way

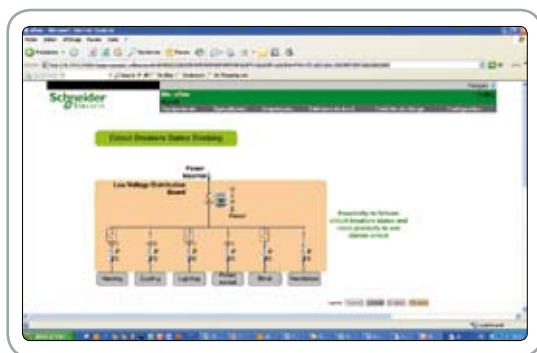
Are you looking for an easy, cost-effective way to reduce energy consumption, lower utility bills, facilitate operation and maintenance, and make your building greener?

The on-site solution is particularly suitable for customers:

- Who want total control over their energy data
- Who need essential load control functions like daily scheduling
- Who need to keep all data management in-house for security reasons
- Who have or would like to train an in-house energy manager
- Who have the skills and resources they need to manage issues like software upgrades, maintenance, and data backup in house
- Who prefer to invest in their own energy management system rather than subscribing to a service

The building operator retains total control over the data

With the on-site solution, once the necessary metering devices and energy management controller are installed, the building operator can carry out the necessary controls and alarming. All information is available in real time at all times from any PC. This enables users to respond quickly in the event of a malfunction like power to cooling equipment being cut off, for instance, or other issues affecting WAGES consumption. In particular, on/off load control can be used to turn lights off automatically in certain areas of the building, avoiding waste and boosting energy savings.



Load control

On/off load control function increases energy savings and facilitates operation.



User benefits

> Cost-effective:

- The solution works with pulse metering technology
- Possible small initial rollout to secure quick ROI can be scaled up later with additional metering

> **Pre-developed energy management controller software modules** eliminate the need for software development

> Powerful customization capabilities:

implement additional control functions if and when required

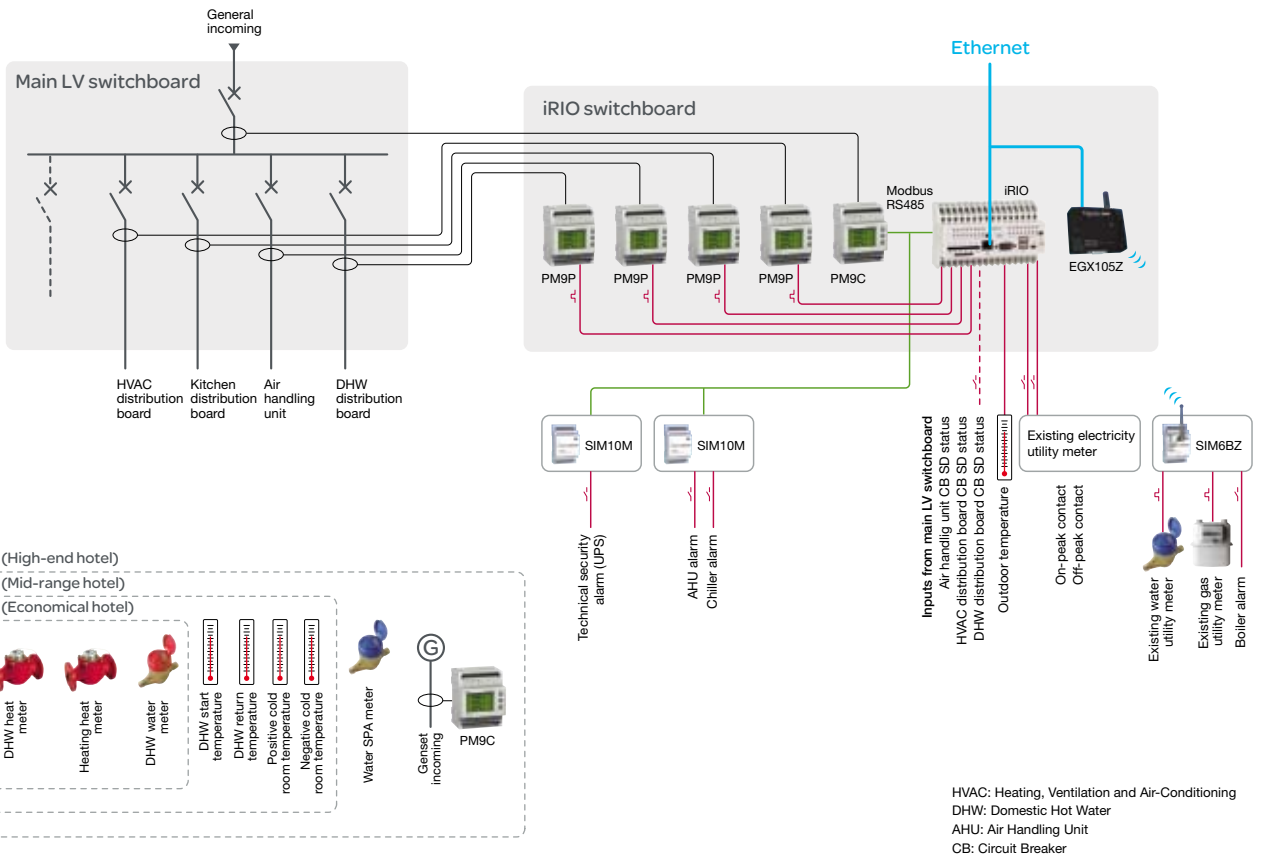
> Web-based for easy implementation:

no dedicated workstation required; data can be accessed from any PC, tablet, or smartphone

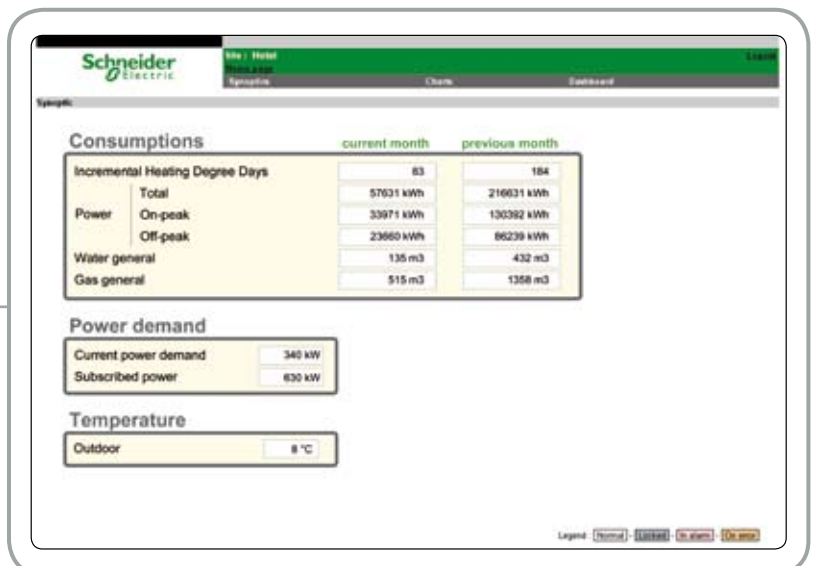
On-Site solution

Hotel

Sample architecture



Sample dashboard



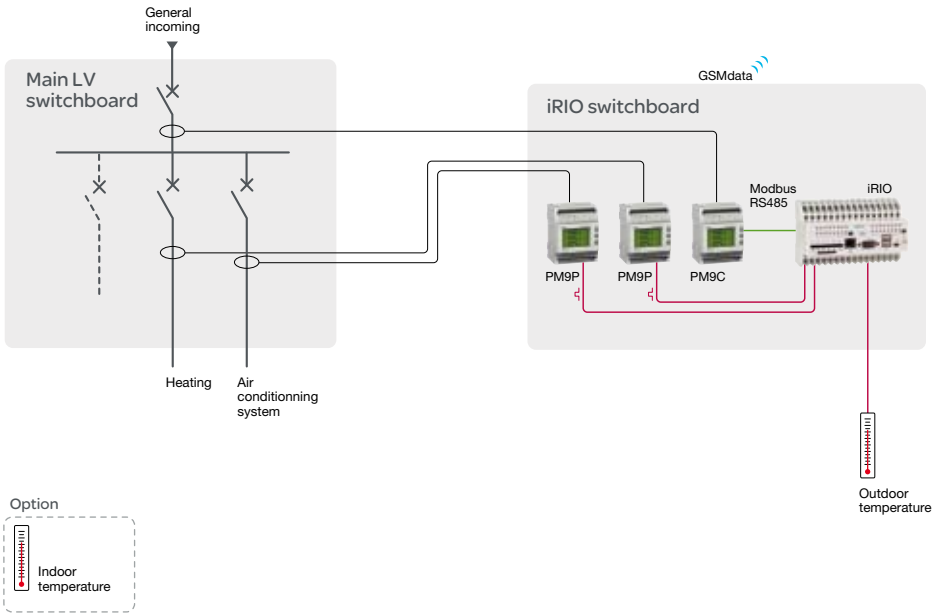
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	iRIO Ethernet	1	iRIO Ethernet	1	TMYAAHRP00010
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYAAHRP00002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
			Power supply 0-24V	1	ABL8MEM24006
Switch	1	Switch	1		
Electrical devices	Electrical devices	1	Enclosure	1	
			Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
			Interrupter 4x40A	1	15172
Electrical power meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	3	
	3x2,5 mm² cable	9	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	4	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	1	PM9c	1	15198
			CT split core [63-630] A	3	
Water and gas meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	
AHU - Chiller technical alarms					
Cabling	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
Communication devices	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006
UPS technical alarm					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120 ohms)	1	VW3A8306DRC
Communication devices	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006
Temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	

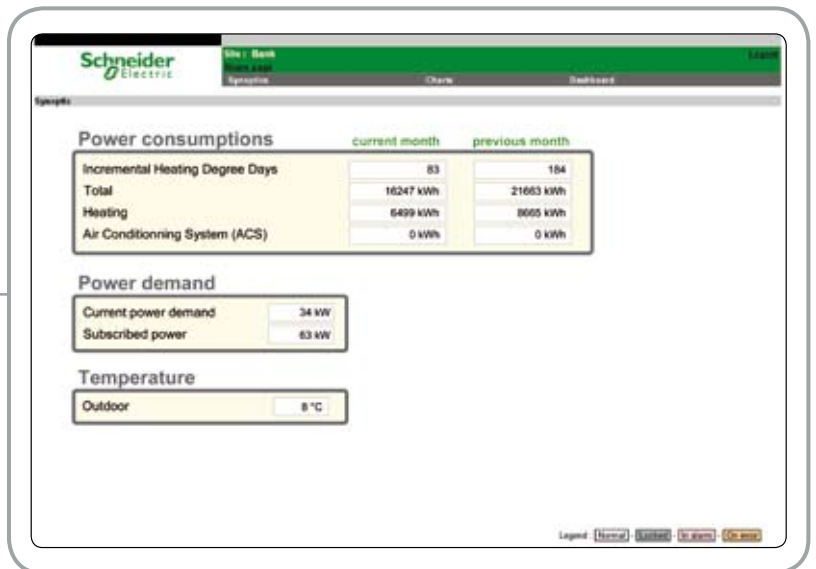
On-Site solution

Bank

Sample architecture



Sample dashboard



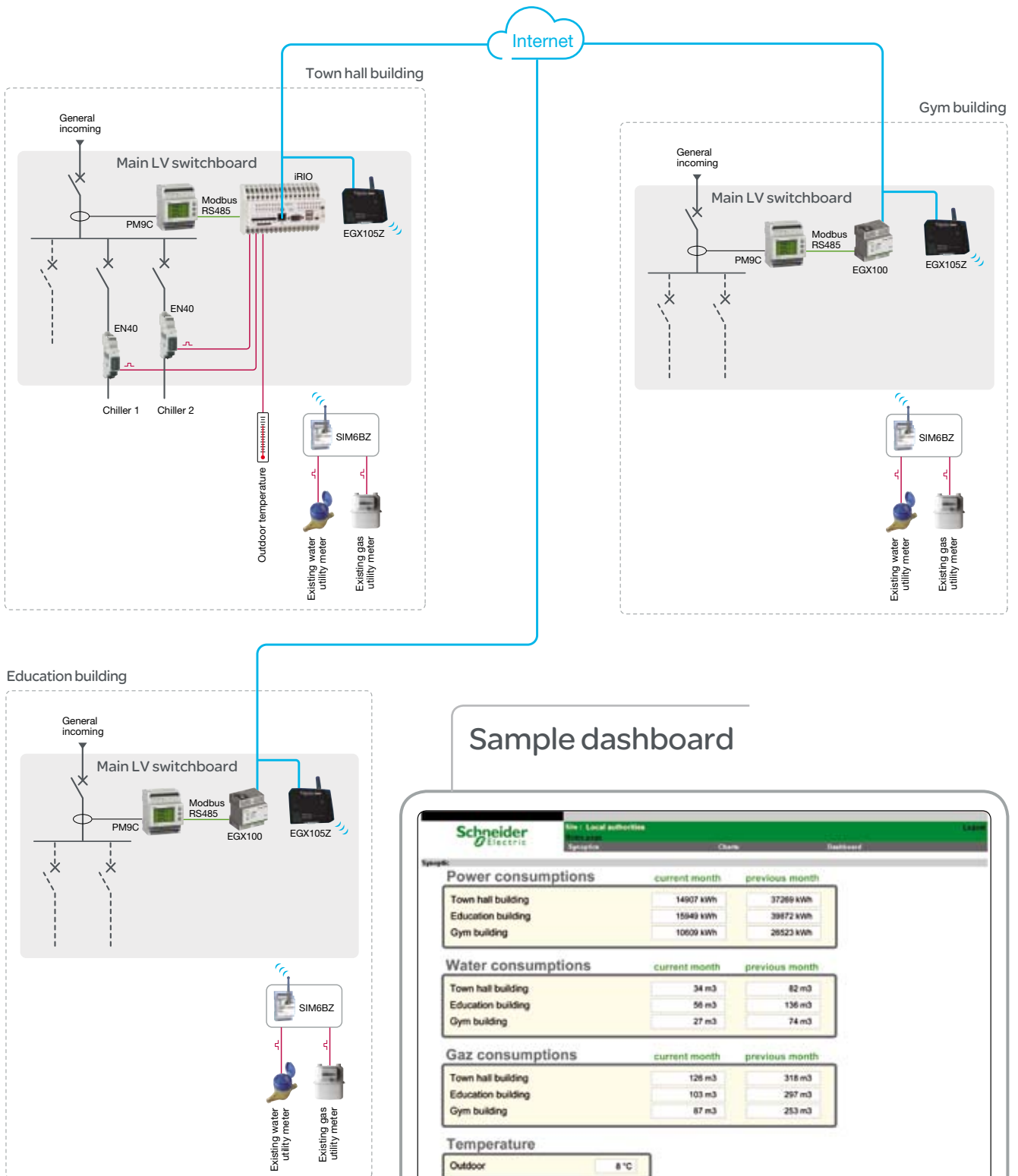
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Communication devices	iRIO GSM	1	iRIO GSM	1	TMYYAHRP00011
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYYAHRP00002
Electrical devices	Electrical devices	1	Enclosure	1	
			Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
			Interrupter 4X40A	1	15172
Electrical power meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	2	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	1	PM9c	1	15198
			CT solid core [63-630] A	3	
Temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	

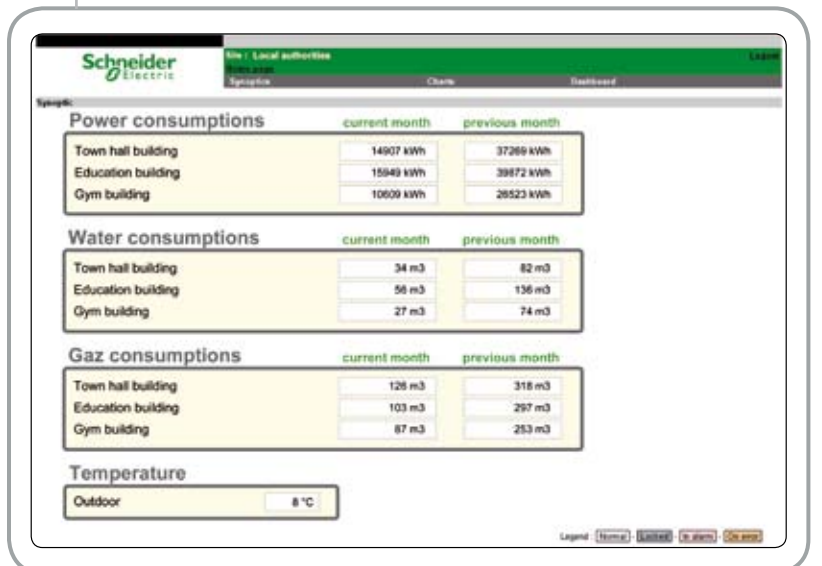
On-Site solution

Local authorities

Sample architecture



Sample dashboard



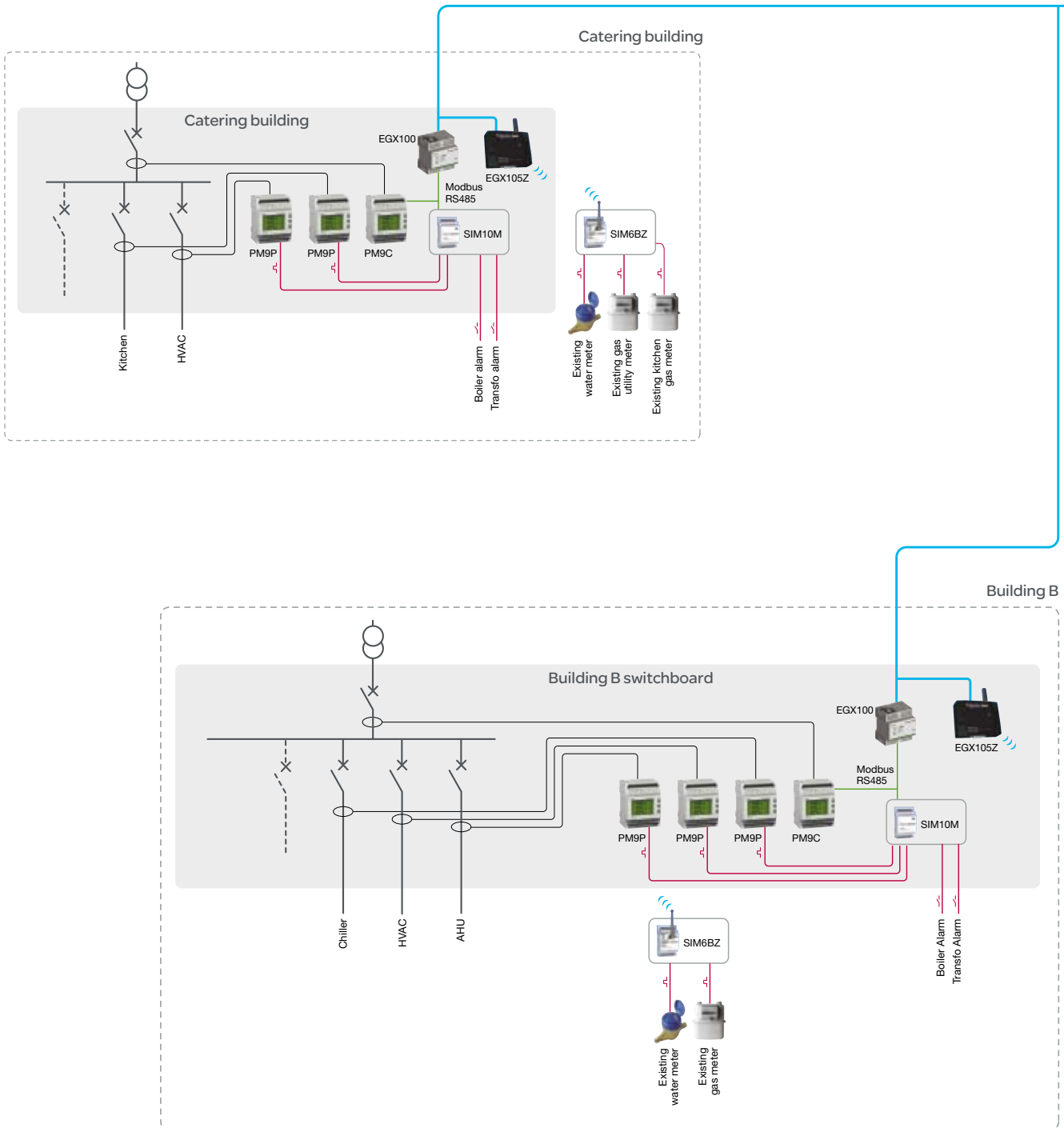
Bill of materials

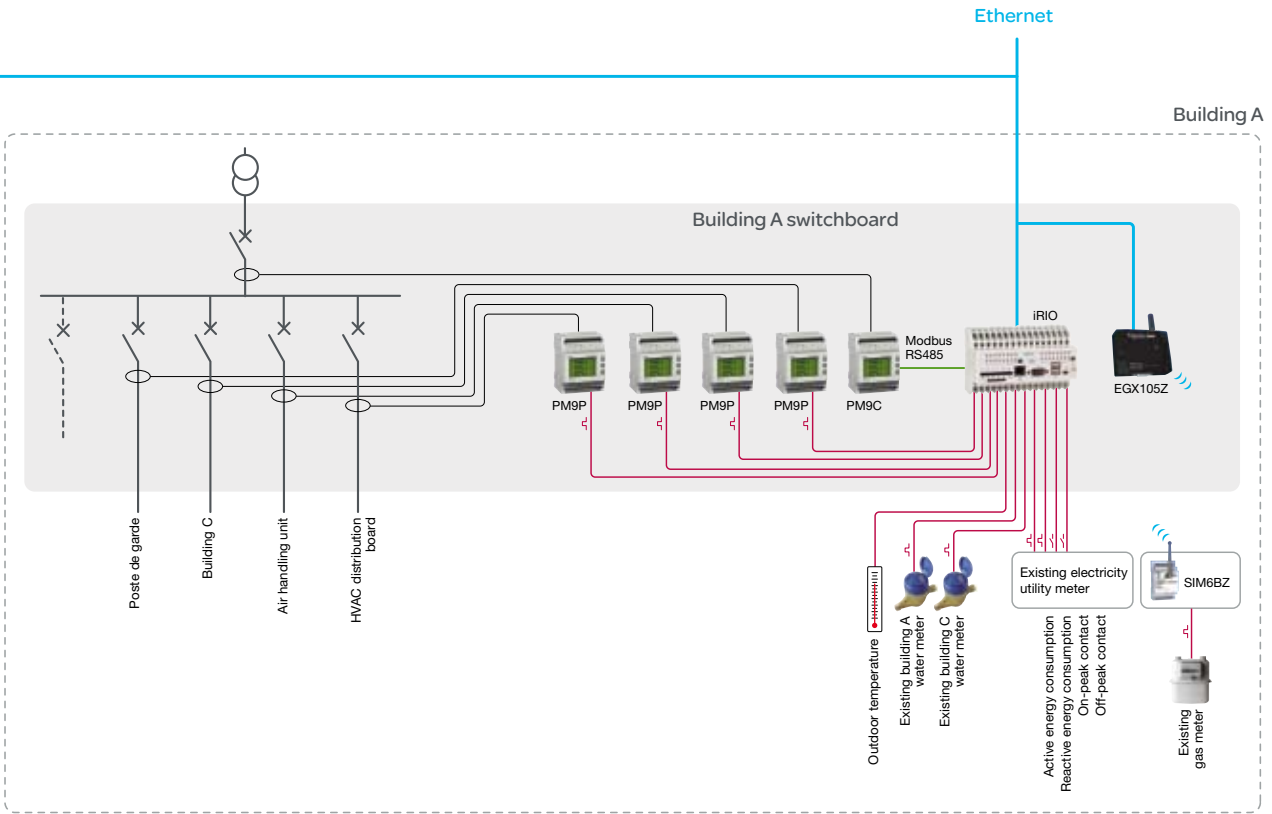
Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	iRIO Ethernet	1	iRIO Ethernet	1	TMYAAHRP00010
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYAAHRP00002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
			Power supply 0-24V	1	ABL8MEM24006
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Town hall building electrical power meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	EN40p	1	EN40p	2	15239
	PM9c	1	PM9c	1	15198
			CT solid core [63-630] A	3	
Buildings water & gas meters					
Cabling	3x2,5 mm² cable	6	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	3	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	
Education & Gym buildings electrical power meters					
Cabling	Ethernet cat 5 cable	2	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	2	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Communication devices	EGX100	2	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	Gateway Zigbee	2	Gateway Zigbee	1	METEGX105Z
	Switch	2	Switch	1	
Electrical devices	Electrical devices	2	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Power meters	PM9c	2	PM9c	1	15198
			CT solid core [63-630] A	3	
Town hall building outdoor temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	

On-Site solution

Medium office

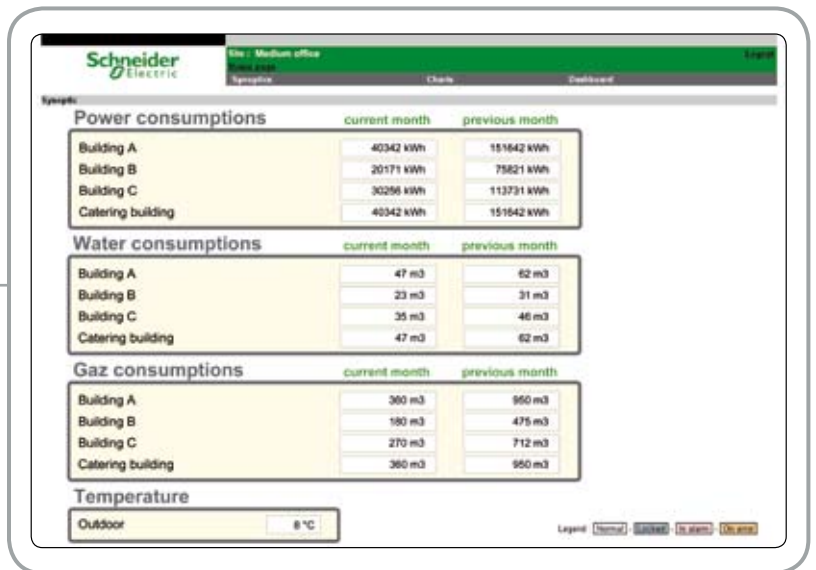
Sample architecture





HVAC: Heating, Ventilation and Air-Conditioning
 AHU: Air Handling Unit

Sample dashboard



... Medium office

Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	Analogic input module	1	Analogic input module (4 inputs)	1	TMYAAHRP0002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
			Power supply 0-24V	1	ABL8MEM24006
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Building A electrical & water meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	10	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	4	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9C	1	PM9C	1	15198
			CT solid core [63-630] A	3	
Building A gas meter					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	
Building A outdoor temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	

Category	Product	Qty	Denomination	Qty	Reference
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Catering building electrical meters

Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	2	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	4	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	1	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electric devices	Electric devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Power meters	PM9p	2	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	1	PM9c	1	15198
			CT solid core [63-630] A	3	

Building B electrical meters

Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	2	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	5	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	1	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electric devices	Electric devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Power meters	PM9p	3	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	1	PM9c	1	15198
			CT solid core [63-630] A	3	

Catering building water & gas meters

Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	

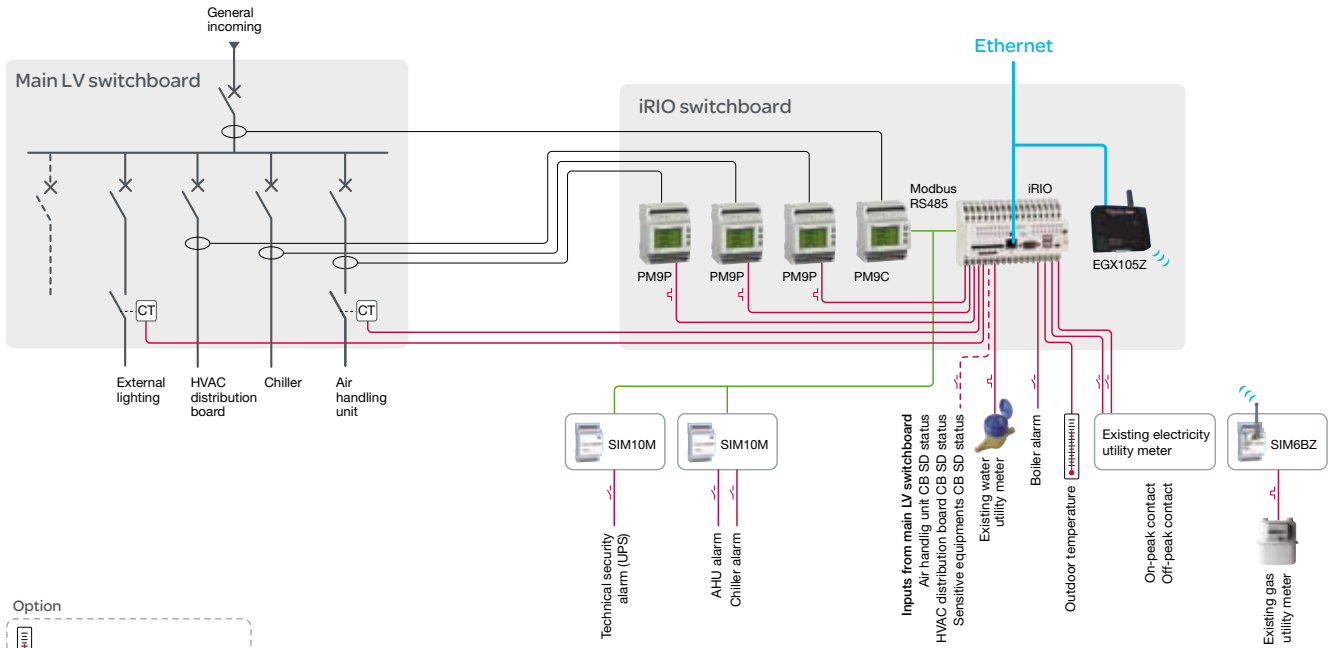
Building B water & gas meters

Cabling	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	

On-Site solution

Small office

Sample architecture

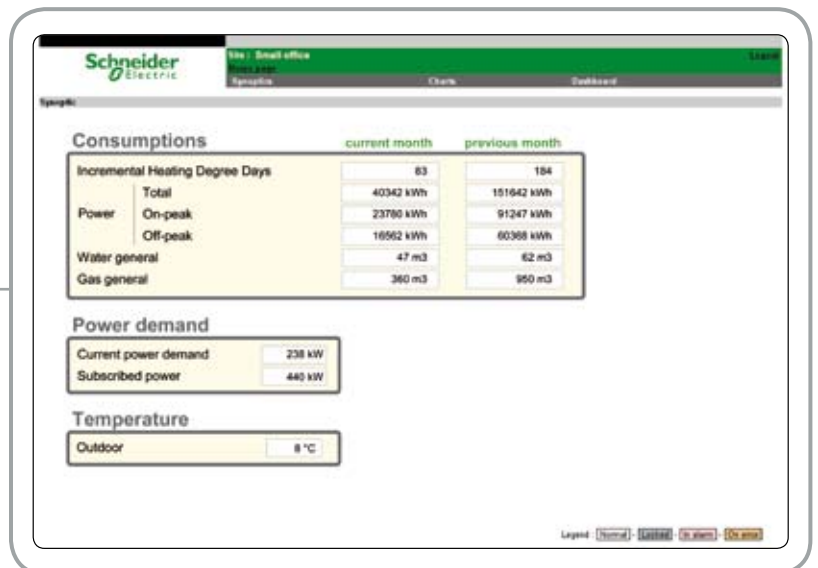


Option

Indoor temperature

HVAC: Heating, Ventilation and Air-Conditioning
 AHU: Air Handling Unit
 CB: Circuit Breaker
 CT: Contactor

Sample dashboard



Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	iRIO Ethernet	1	iRIO Ethernet	1	TMYAAHRP00010
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYAAHRP00002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
			Power supply 0-24V	1	ABL8MEM24006
Switch	1	Switch	1		
Electrical devices	Electrical devices	1	Enclosure	1	
			Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
			Interrupter 4x40A	1	15172
Electrical & water meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	3	
	3x2,5 mm² cable	12	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	3	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	1	PM9c	1	15198
			CT solid core [63-630] A	3	
Gas meter					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	
AHU - Chiller technical alarms					
Cabling	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
Communication devices	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006
UPS technical alarm					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Communication devices	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006
Temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	

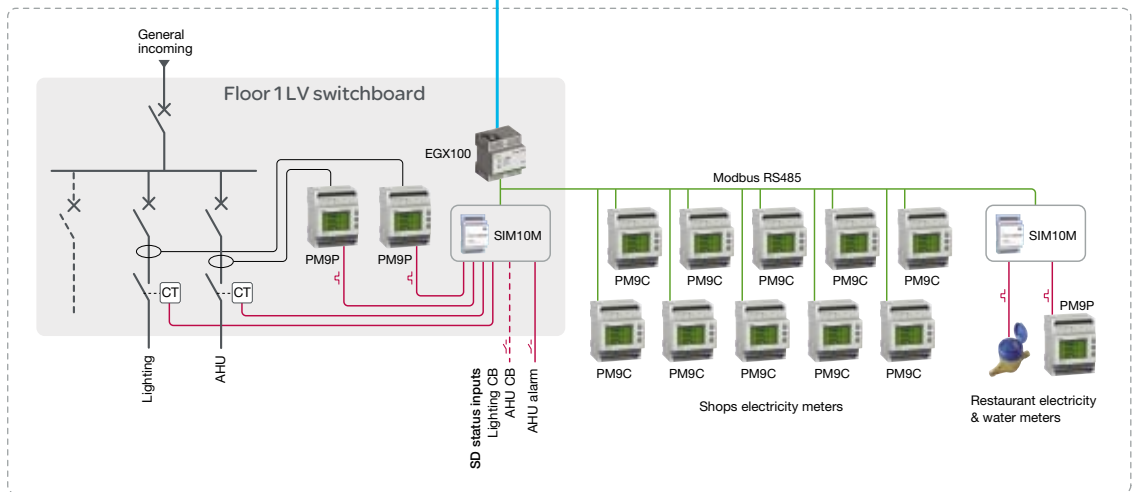
On-Site solution

Shopping mall

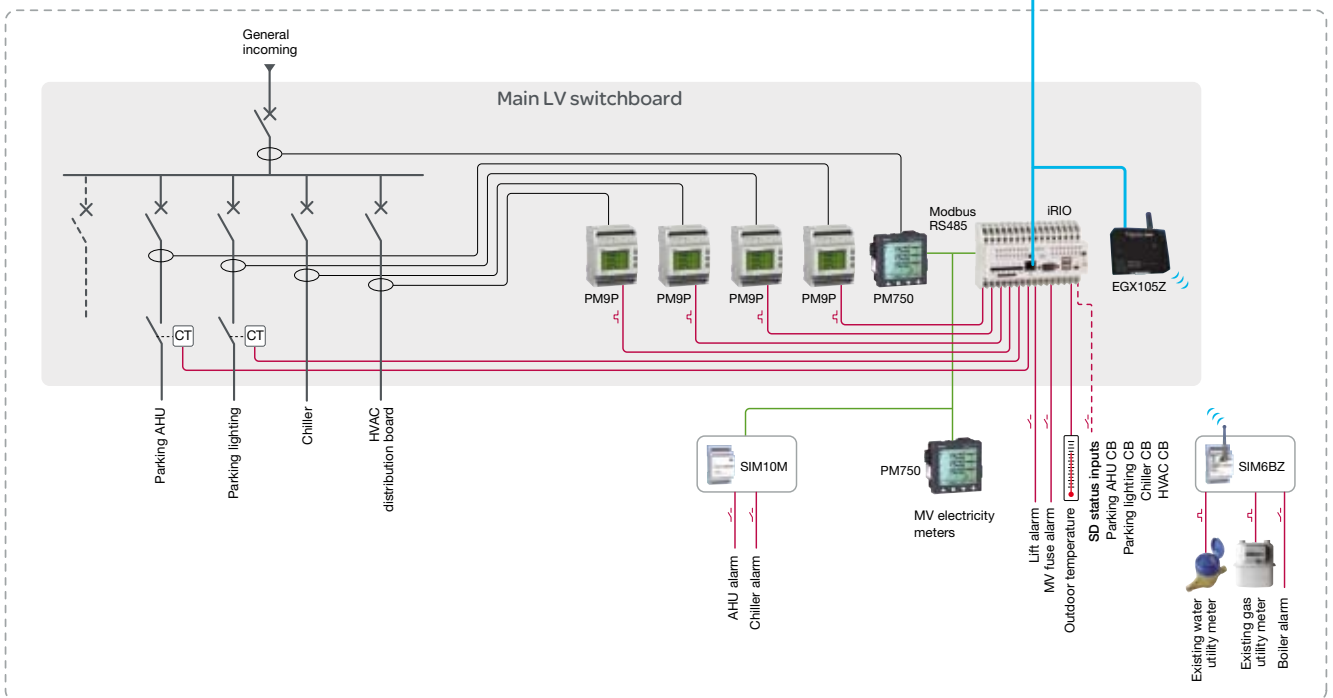
Sample architecture

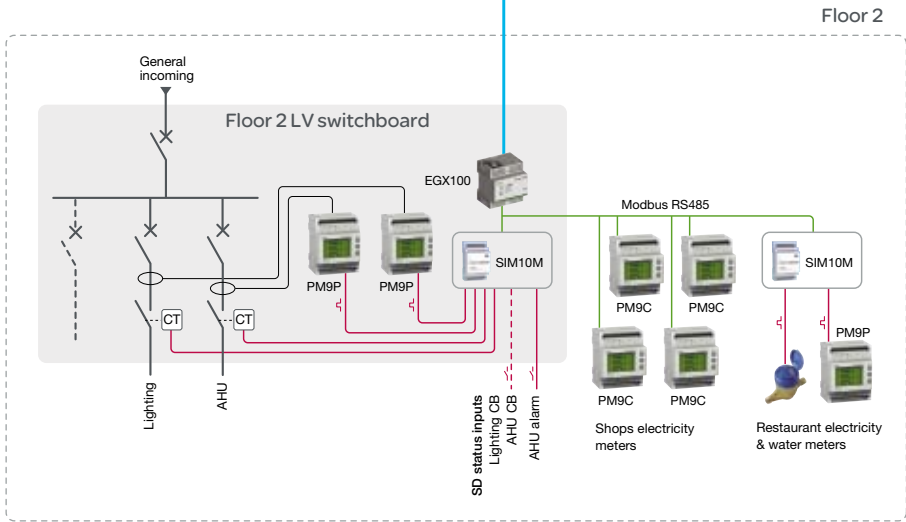
Ethernet

Floor 1



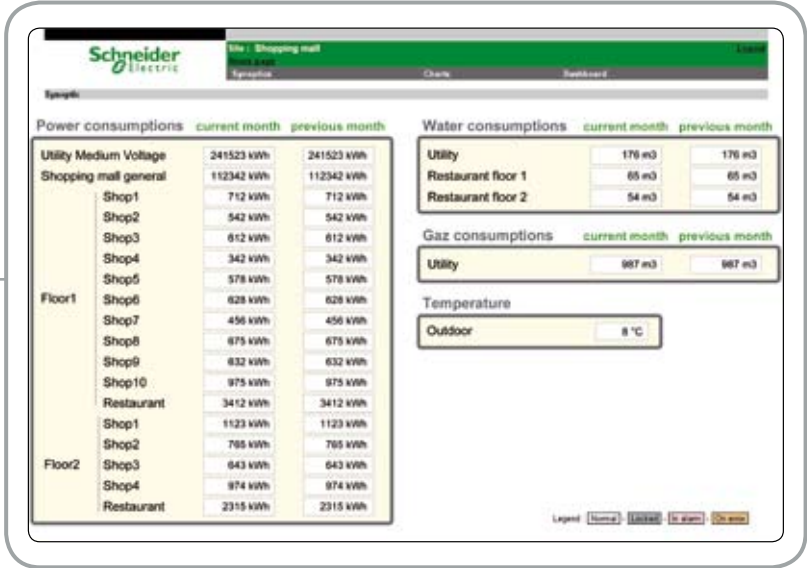
Floor 0





HVAC: Heating, Ventilation and Air-Conditioning
 AHU: Air Handling Unit

Sample dashboard



... Shopping mall

Bill of materials

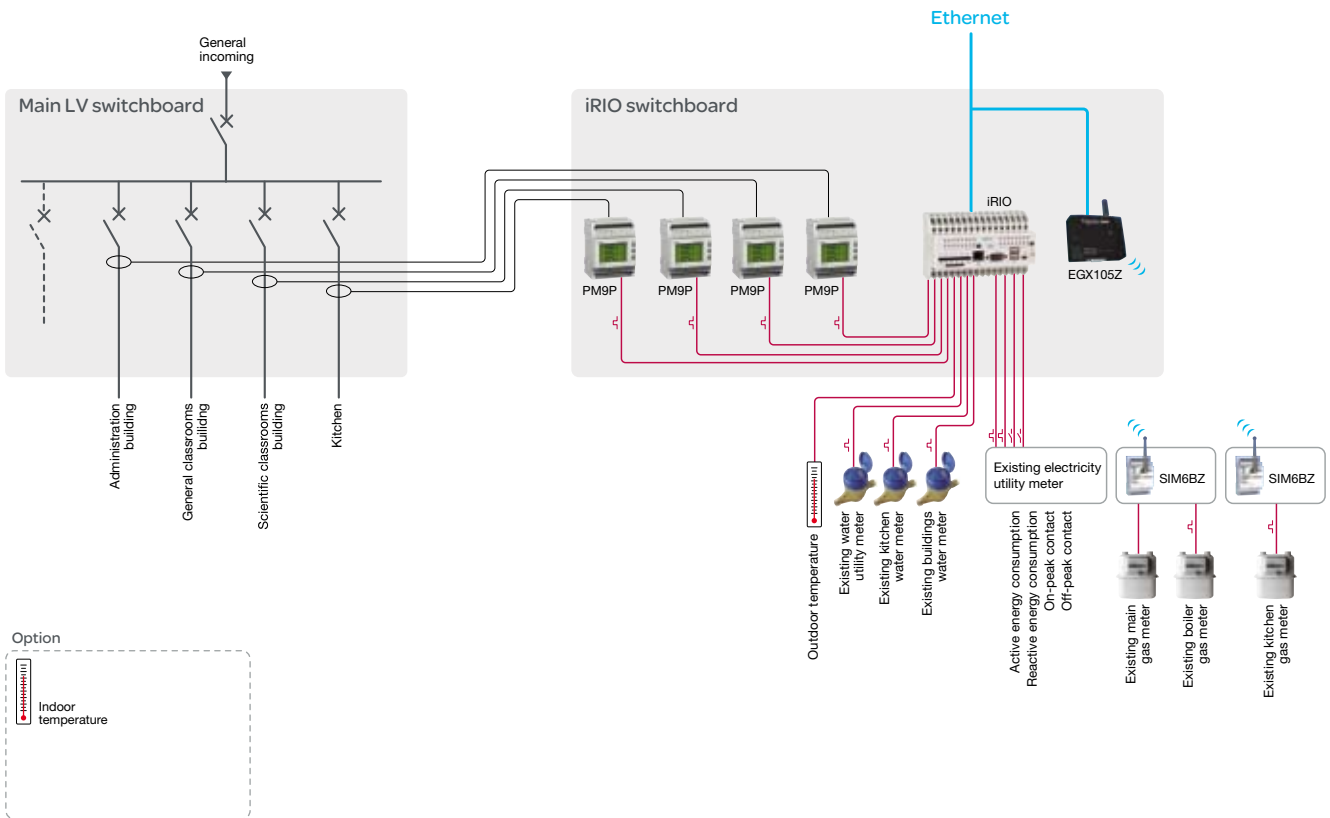
Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	iRIO Ethernet	1	iRIO Ethernet	1	TMYYAHRP00010
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYYAHRP00002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
			Power supply 0-24V	1	ABL8MEM24006
Switch	1	Switch	1		
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Floor 0 electrical power meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	33	
	3x2,5 mm² cable	12	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	4	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM750	2	PM750	1	PM750MG
			CT solid core [63-630] A	3	
Floor 0 gas & water meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6Z
			Enclosure	1	
Floor 0 AHU & chiller technical alarms					
Cabling	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120 ohms)	1	VW3A8306DRC
Communication devices	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006

Category	Product	Qty	Denomination	Qty	Reference
Temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	
Floor 1 electrical power meters					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	10	Modbus cable (Qty in meters)	10	
	3x2,5 mm² cable	7	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	1	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
Electric devices	Electric devices	1	Circuit breaker C60L 4x10A curveC	1	25449
			Vigi C60 300mA 25A		26533
Power meters	PM9p	2	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	10	PM9c	1	15198
			CT solid core [0-63] A	3	
Floor 2 electrical power meters					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	4	Modbus cable (Qty in meters)	10	
	3x2,5 mm² cable	7	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	1	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A		26533
Power meters	PM9p	2	PM9p	1	15197
			CT solid core [63-630] A	3	
	PM9c	4	PM9c	1	15198
			CT solid core [0-63] A	3	
Restaurants electricity & water meters					
Cabling	3x2,5 mm² cable	4	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	2	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Communication devices	SIM modbus 24V	2	SIM modbus 24V	1	METSIM10M
			Enclosure	1	
			Power supply 0-24V	1	ABL8MEM24006
Power meters	PM9p	2	PM9p	1	15197
			CT solid core [63-630] A	3	

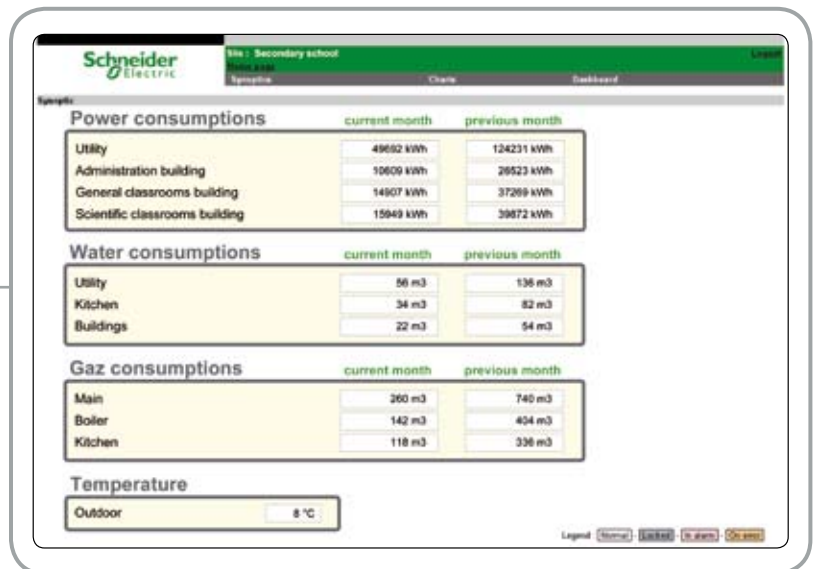
On-Site solution

Secondary school

Sample architecture



Sample dashboard



Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
iRIO					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	iRIO Ethernet	1	iRIO Ethernet	1	TMYAAHRP00010
	Analogic input module	1	Analogic input module (4 inputs)	1	TMYAAHRP00002
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX1056Z
			Power supply 0-24V	1	ABL8MEM24006
Switch	1	Switch	1		
Electrical devices	Electrical devices	1	Enclosure	1	
			Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
			Interrupter 4X40A	1	15172
Electrical & water meters					
Cabling	3x2,5 mm² cable	11	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	4	PM9p	1	15197
			CT solid core [63-630] A	3	
Temperature					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Temperature sensor	PT100	1	Outdoor PT100	1	
Gas meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	15	
Communication devices	SIM Zigbee battery	2	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	



Let Schneider Electric take care of everything with the Remote Energy Management solution

Are you looking for a hassle-free way to reduce energy consumption, lower utility bills, facilitate operation and maintenance, and make your building greener?

The Remote Energy Management solution is particularly suitable for customers:

- Who prefer not to handle data storage and backup themselves
- Who do not have the skills or resources they need to manage the technical and IT aspects of the solution in house
- Who would like expert energy management advice from professionals.
- Who wish to shift a portion of their capital expenditures to operating expenses
- Who prefer the predictability of a regular subscription fee to facilitate budgeting

No software to install or upgrade: the data you want, right in your inbox

The Remote Energy Management solution easily turns your energy usage data into actionable information, accessible via a standard web browser, eliminating the need to install additional servers or software on site. The service can either be linked to existing meters or new power meters via communication gateway. It is easy to install and use and can be customized to meet end-user specifications. Just tell Schneider Electric which information you want and how often, and that's all! There's nothing more to do.



Multi-site management features

- View simultaneously several locations equipped with the Remote Energy Management solution
- Green map pins indicate facilities that have achieved their energy-savings goals



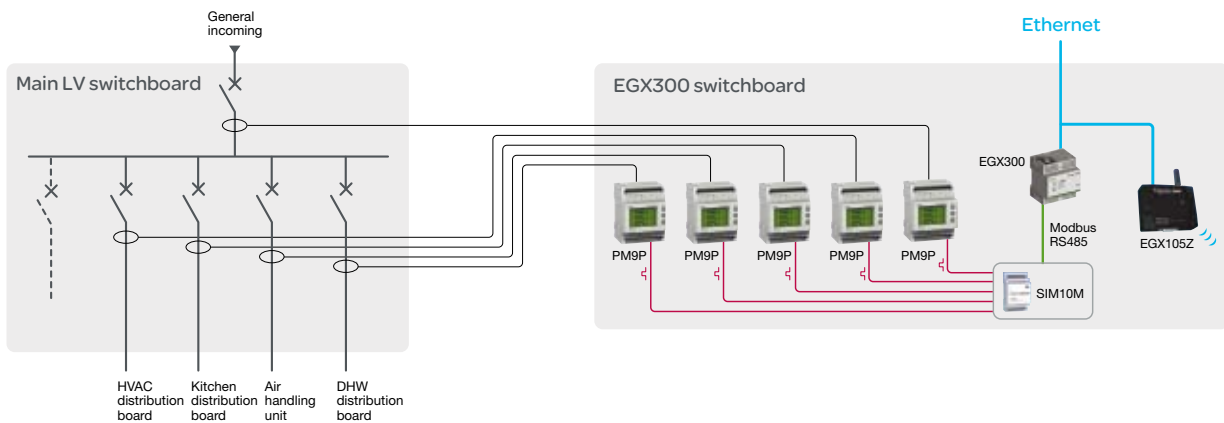
User benefits

- > **Cost-effective and rapid return on investment:** subscription fees are partially offset by immediate energy savings
- > **Enterprise-wide access to energy information:** a simple web browser on a PC, tablet, or smartphone is all you need to access data from anywhere
- > **No need to install servers and software on site:** Schneider Electric handles all data transmission, processing, and backup in a 24/7 high-reliability data center
- > **Analysis and recommendations** delivered by Schneider Electric energy experts
- > **Easy to learn and use:** no special training required

Remote solution

Hotel

Sample architecture



HVAC: Heating, Ventilation and Air-Conditioning
 DHW: Domestic Hot Water
 AHU: Air Handling Unit

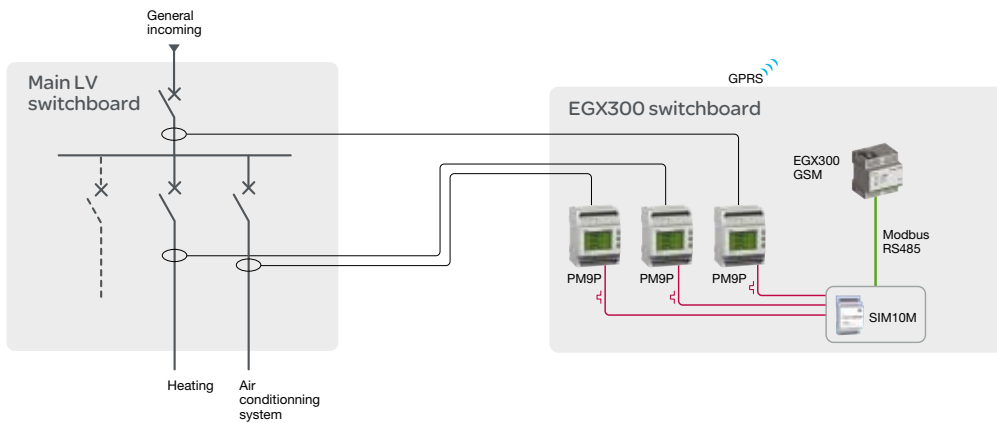
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EXG300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Enclosure	1	25449
		1	Circuit breaker C60L 4x10A curve C	1	26533
		1	Vigi C60 300mA 25A	1	15172
		1	Interrupter 4x40A	1	
		1	Power supply 0-24V	1	ABL8MEM24006
Electrical power meters					
Cabling	3x2,5 mm² cable	5	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Power meters	PM9p	5	PM9p	1	15197
		3	CT solid core [63-630] A	3	
Water and gas meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
		1	Enclosure	1	

Remote solution

Bank

Sample architecture



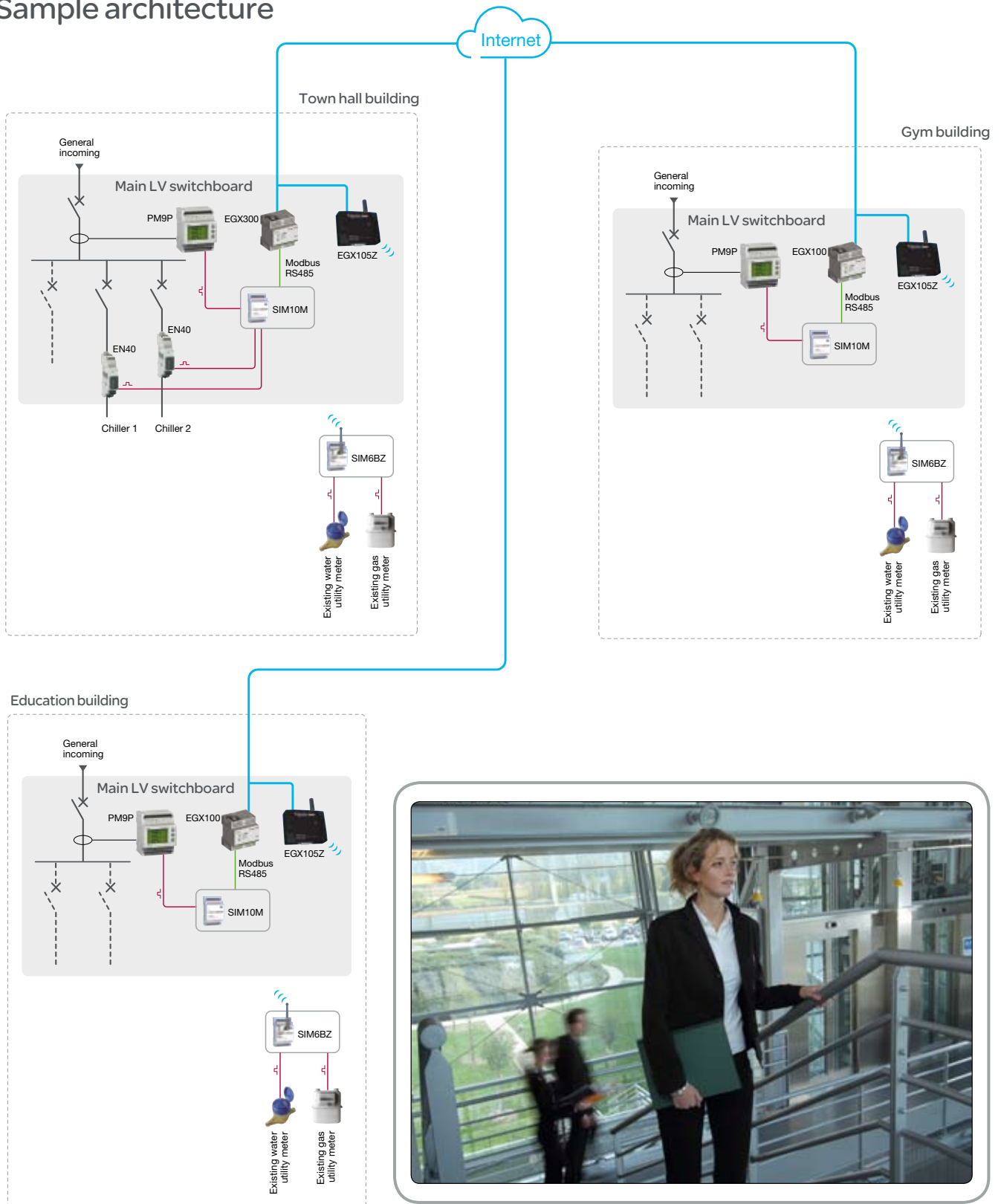
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EXG300					
Communication devices	EGX300 GSM	1	EGX300 GSM	1	METEGGX1
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
Electrical devices	Electrical devices	1	Enclosure	1	
		1	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		1	Interrupter 4x40A	1	15172
		1	Power supply 0-24V	1	ABL8MEM24006
Electrical power meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	3	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Power meters	PM9p	3	PM9p	1	15197
		3	CT solid core [63-630] A	3	

Remote solution

Local authorities

Sample architecture



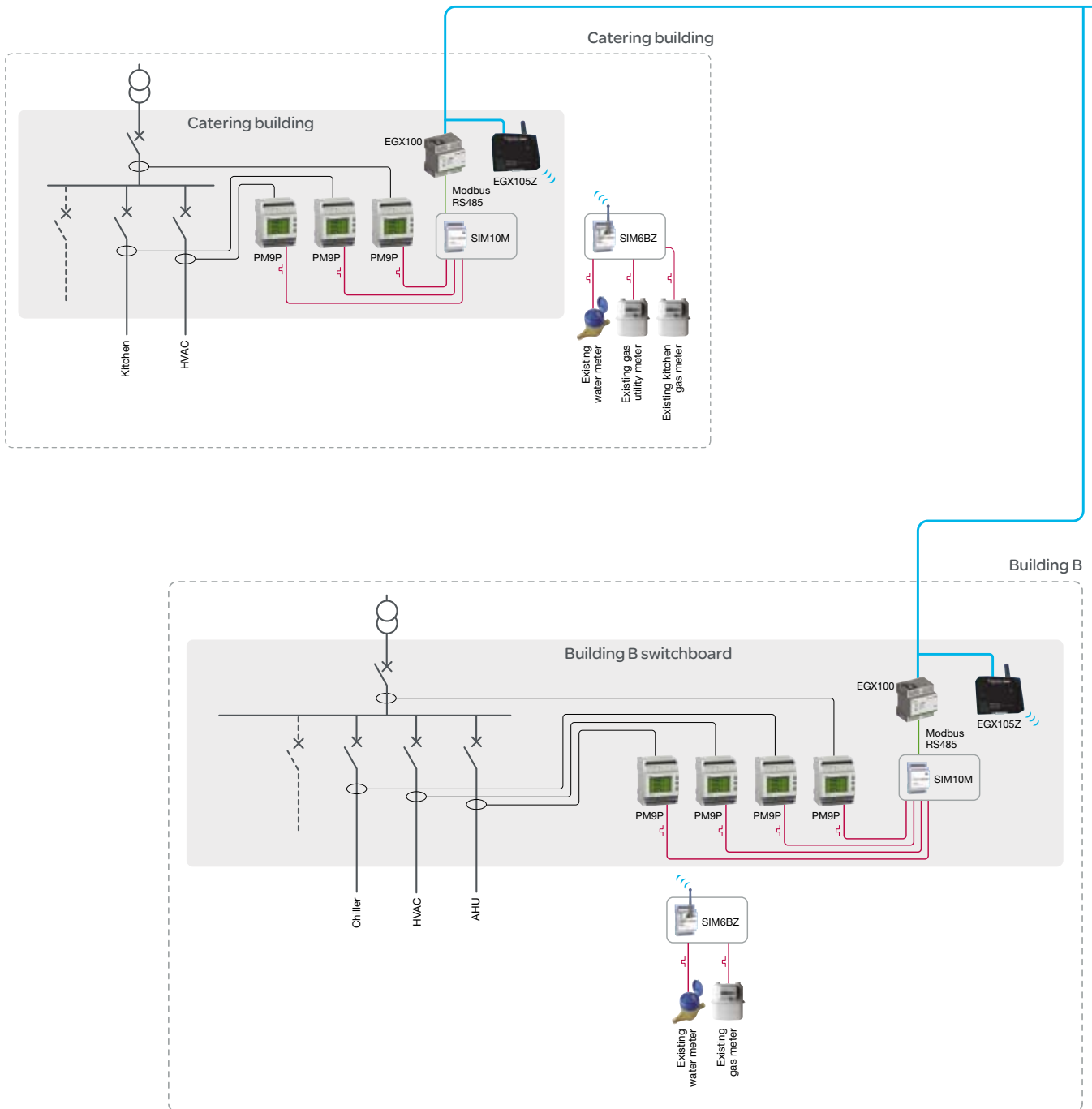
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EGX300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		1	Power supply 0-24V	1	ABL8MEM24006
Town hall building electrical power meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	1	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Power meters	EN40p	2	EN40p	1	15239
	PM9p	1	PM9p	1	15197
		3	CT solid core [63-630] A	3	
Buildings water and gas meters					
Cabling	3x2,5 mm² cable	6	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	3	SIM Zigbee battery	1	METSIM6BZ
		1	Enclosure	1	
Education & Gym buildings electrical power meters					
Cabling	Ethernet cat 5 cable	2	Ethernet cat 5 cable (Qty in meters)	60	
	3x2,5 mm² cable	2	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	1	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Communication devices	EGX100	2	EGX100	1	EGX100MG
		1	Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	2	Gateway Zigbee	1	METEGX105Z
Electrical devices	Electrical devices	2	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		2	Switch	1	
Power meters	PM9p	2	PM9p	1	15197
		3	CT solid core [63-630] A	3	

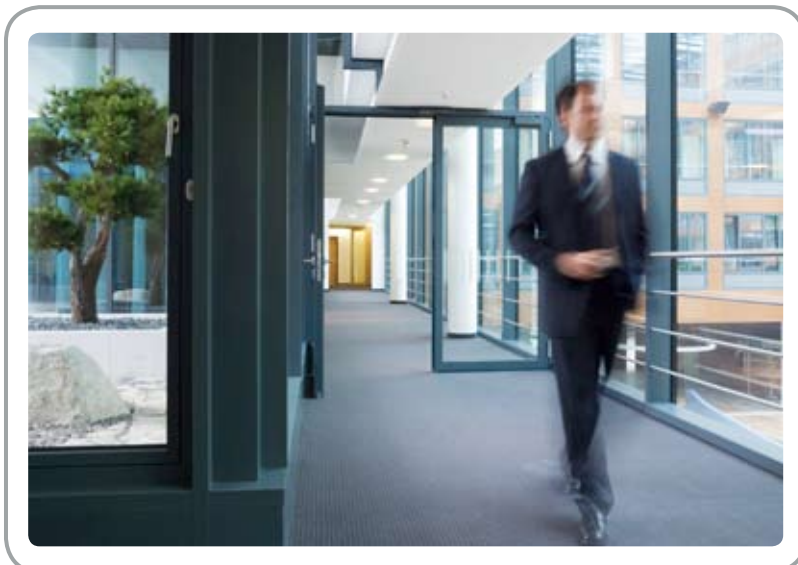
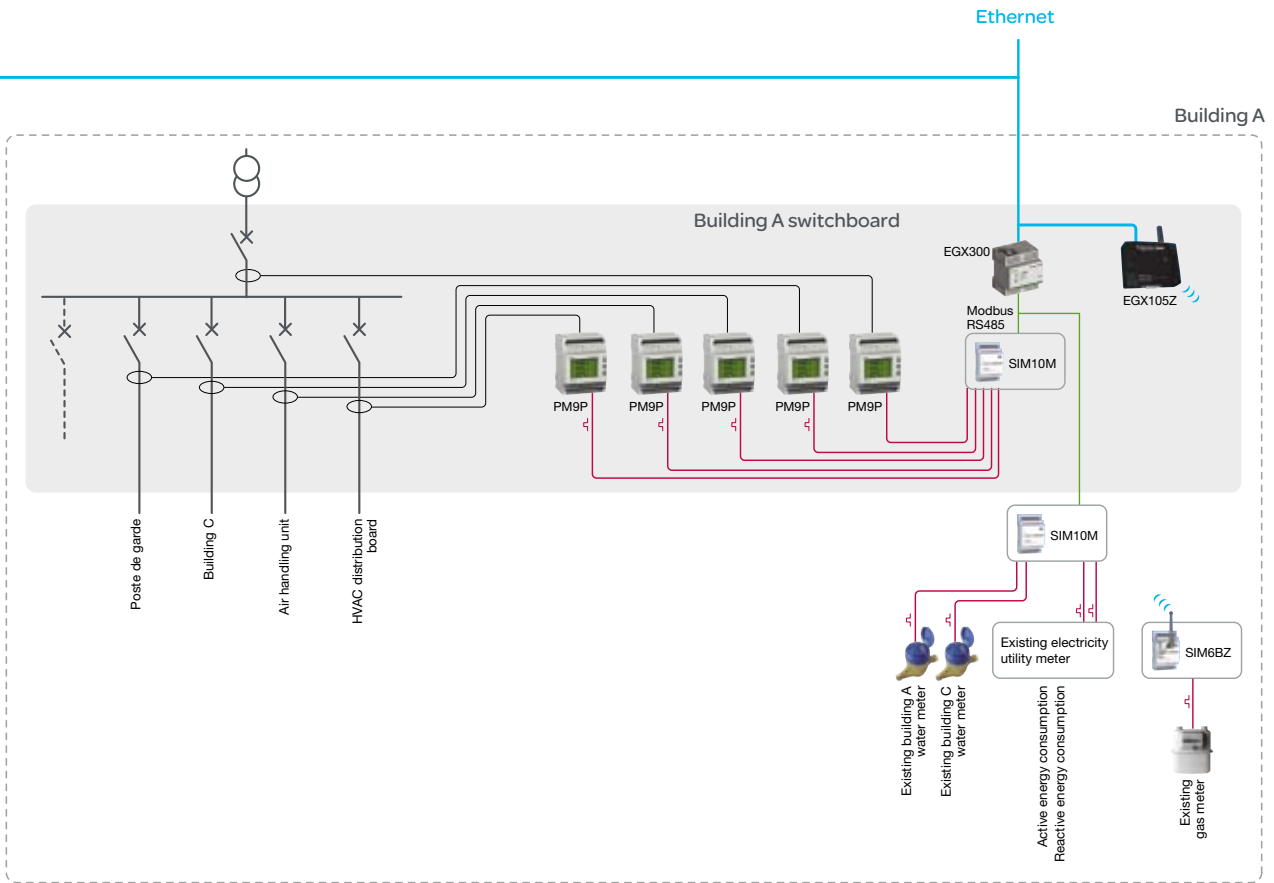
Remote solution

Medium office

Sample architecture



HVAC: Heating, Ventilation and Air-Conditioning
AHU: Air Handling Unit



... Medium office

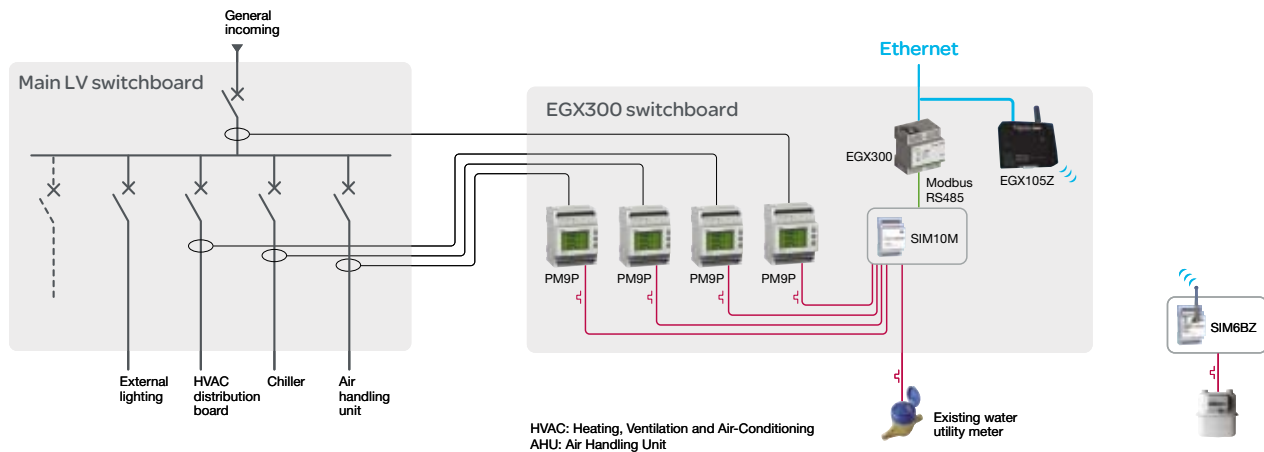
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EGX300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
			Power supply 0-24V	1	ABL8MEM24006
Building A electrical & water meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	9	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	5	PM9p	1	15197
			CT solid core [63-630] A	3	
Building A gas meter					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	
Building B & Catering building electrical meters					
Cabling	Ethernet cat 5 cable	2	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	2	Modbus cable (Qty in meters)	1	
	Modbus line termination	2	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	7	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	2	EGX100	1	EGX100MG
			Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	2	Gateway Zigbee	1	METEGX105Z
	Switch	2	Switch	1	
Electrical devices	Electrical devices	2	Circuit breaker C60L 4x10A curve C	1	25449
			Vigi C60 300mA 25A	1	26533
Power meters	PM9p	7	PM9p	1	15197
			CT solid core [63-630] A	3	
Building B & Catering building water & gas meters					
Cabling	3x2,5 mm² cable	5	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	2	SIM Zigbee battery	1	METSIM6BZ
			Enclosure	1	

Remote solution

Small office

Sample architecture



Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EXG300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Enclosure	1	
		1	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		1	Power supply 0-24V	1	ABL8MEM24006
Electrical and water meters					
Cabling	3x2,5 mm² cable	5	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	1	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Power meters	PM9p	4	PM9p	1	15197
		3	CT solid core [63-630] A	3	
Gas meter					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
		1	Enclosure	1	

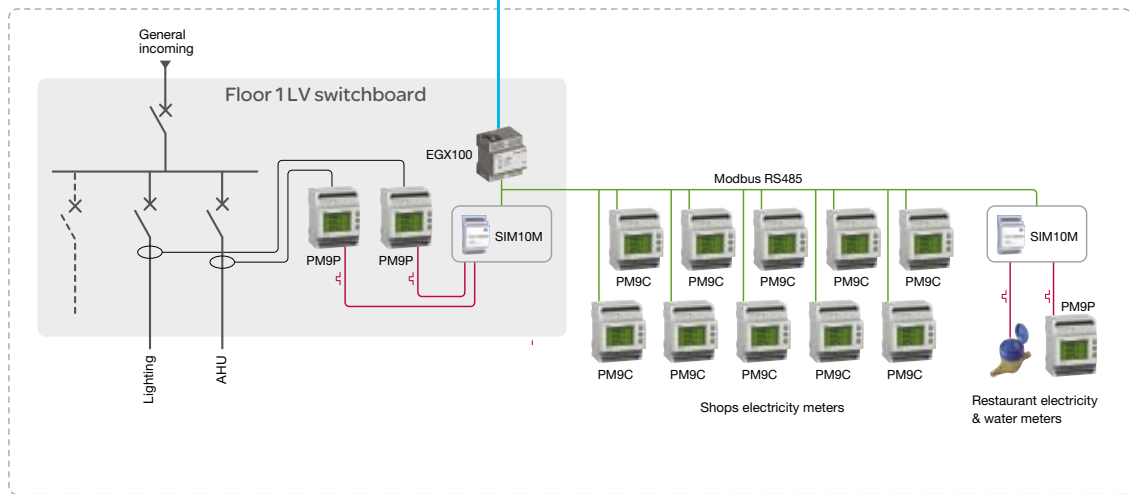
Remote solution

Shopping mall

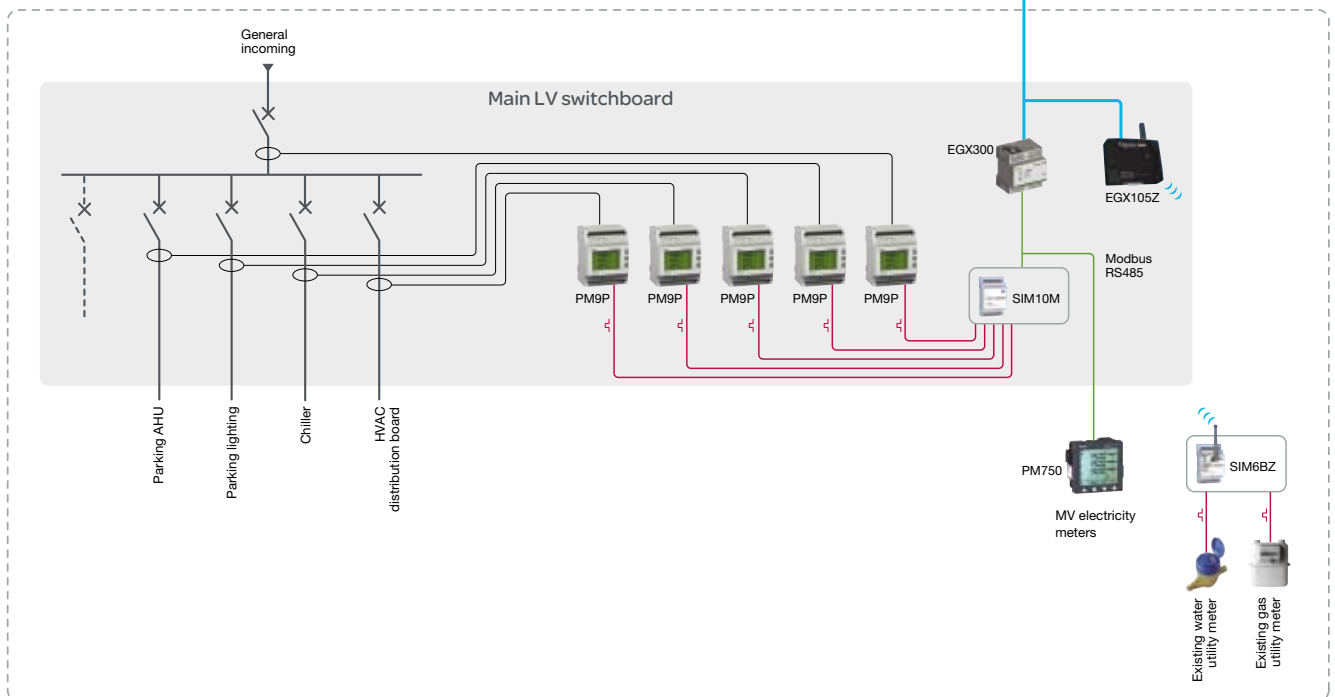
Sample architecture

Ethernet

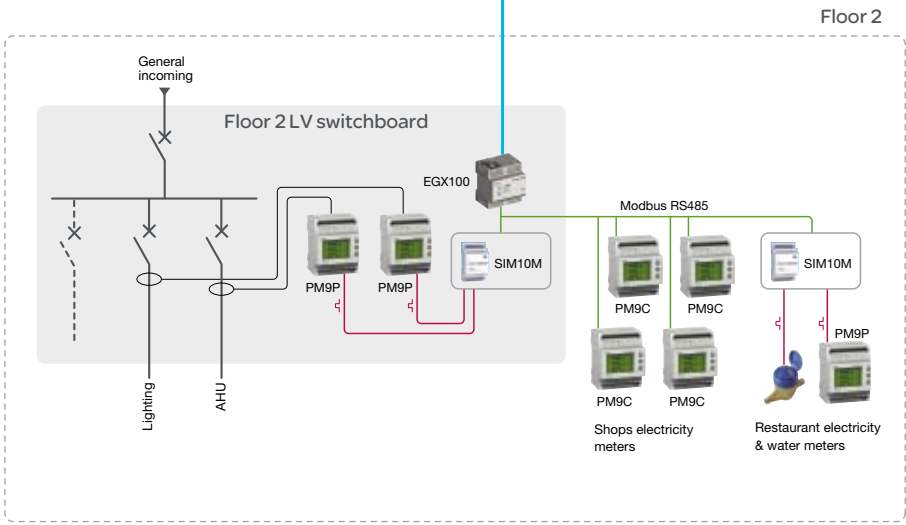
Floor 1



Floor 0



HVAC = Heating, Ventilation and Air-Conditioning
AHU = Air Handling Unit



... Shopping mall

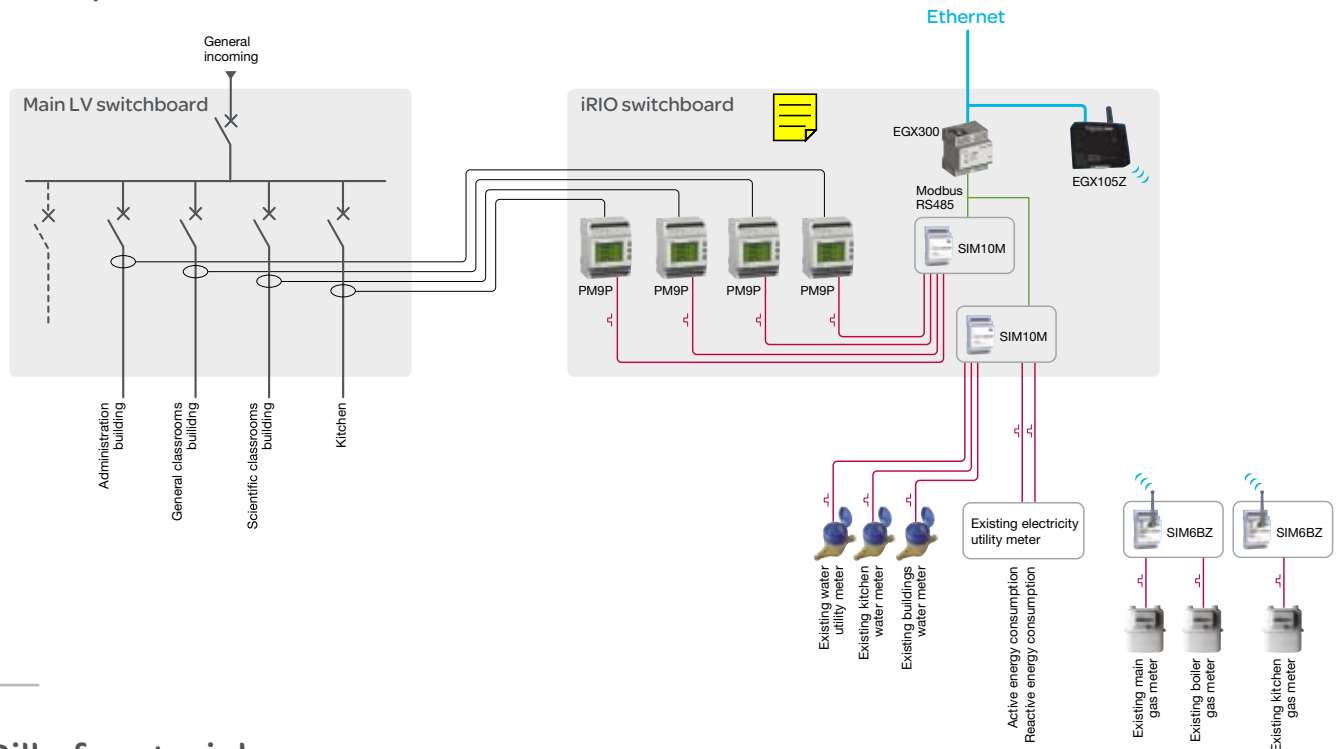
Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EGX300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	1	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		1	Power supply 0-24V	1	ABL8MEM24006
Floor 0 electrical power meters					
Cabling	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
	3x2,5 mm² cable	5	3x2,5 mm ² cable (Qty in meters)	10	
Power meters	PM9p	5	PM9p	1	15197
		5	CT solid core [63-630] A	5	
	PM750	1	PM750	1	PM750MG
3	3	CT solid core > 630 A	3		
Floor 0 gas & water meters					
Cabling	3x2,5 mm² cable	1	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	SIM Zigbee battery	1	SIM Zigbee battery	1	METSIM6BZ
		1	Enclosure	1	
Floor 1 & 2 electrical power meters					
Cabling	Ethernet cat 5 cable	2	Ethernet cat 5 cable (Qty in meters)	60	
	Modbus cable	18	Modbus cable (Qty in meters)	10	
	3x2,5 mm² cable	4	3x2,5 mm ² cable (Qty in meters)	10	
Communication devices	EGX100	2	EGX100	1	EGX100MG
		1	Power supply 0-24V	1	ABL8MEM24006
	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
Electrical devices	Electrical devices	2	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
Power meters	PM9p	4	PM9p	1	15197
		3	CT solid core [63-630] A	3	
	PM9c	14	PM9c	1	15198
3	3	CT solid core [0-63] A	3		
Restaurants electricity & water meters					
Cabling	3x2,5 mm² cable	4	3x2,5 mm ² cable (Qty in meters)	5	
	Modbus cable	2	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120ohms)	1	VW3A8306DRC
Communication devices	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
		1	Enclosure	1	
		1	Power supply 0-24V	1	ABL8MEM24006
Power meters	PM9p	2	PM9p	1	15197
		3	CT solid core [0-63] A	3	

Remote solution

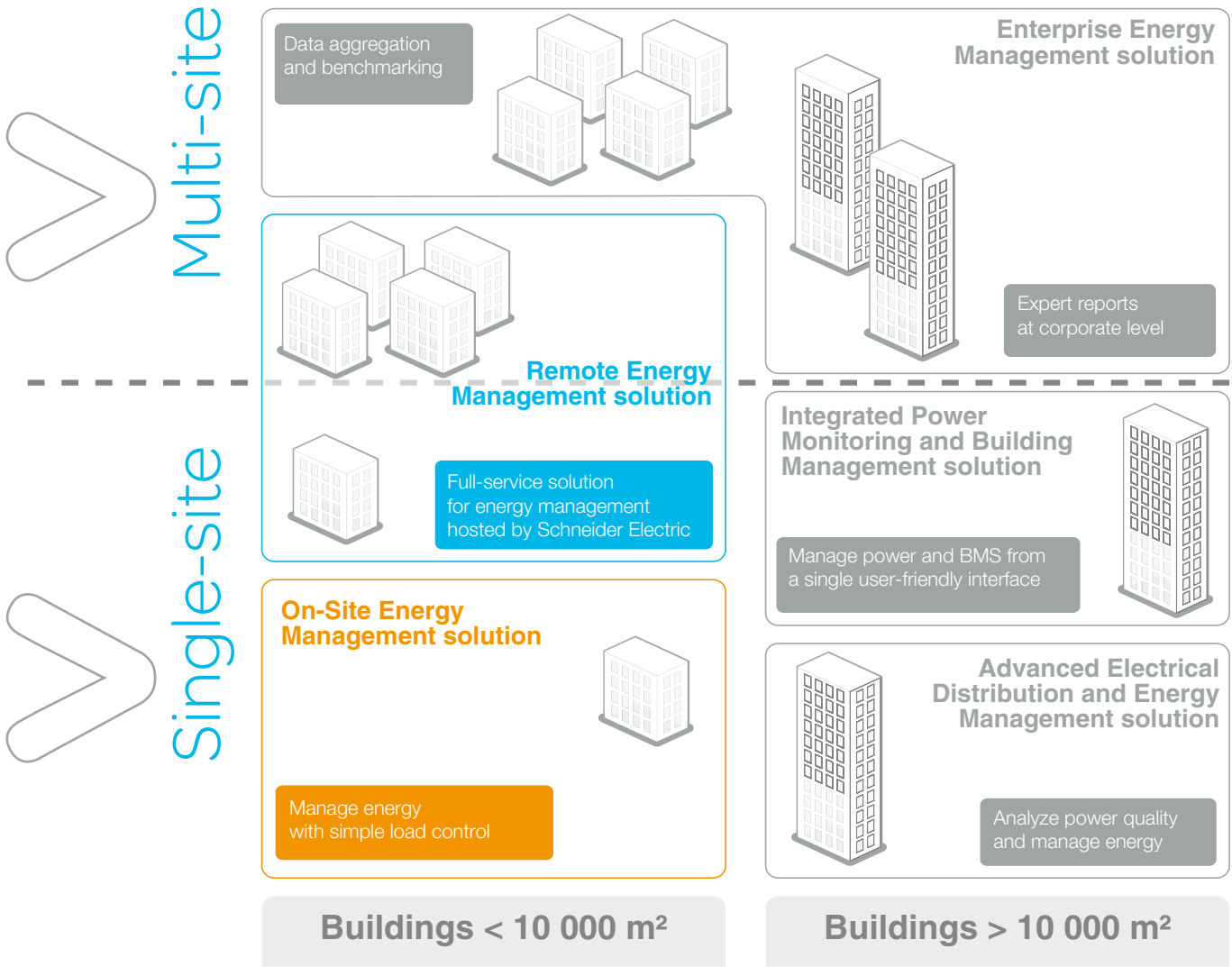
Secondary school

Sample architecture



Bill of materials

Category	Product	Qty	Denomination	Qty	Reference
EGX300					
Cabling	Ethernet cat 5 cable	1	Ethernet cat 5 cable (Qty in meters)	60	
Communication devices	EGX300 Ethernet	1	EGX300 Ethernet	1	EGX300MG
	SIM Modbus slave	2	SIM Modbus slave	1	METSIM10M
	Gateway Zigbee	1	Gateway Zigbee	1	METEGX105Z
	Switch	1	Switch	1	
Electrical devices	Electrical devices	1	Enclosure	1	
		1	Circuit breaker C60L 4x10A curve C	1	25449
		1	Vigi C60 300mA 25A	1	26533
		1	Interrupter 4x40A	1	15172
		1	Power supply 0-24V	1	ABL8MEM24006
Electrical & water meters					
Cabling	3x2,5 mm² cable	9	3x2,5 mm ² cable (Qty in meters)	10	
	Modbus cable	1	Modbus cable (Qty in meters)	30	
	Modbus line termination	1	Modbus line termination (120 ohms)	1	VW3A8306DRC
Power meters	PM9p	4	PM9p	1	15197
		3	CT solid core [63-630] A	3	
Gas meters					
Cabling	3x2,5 mm² cable	3	3x2,5 mm ² cable (Qty in meters)	5	
Communication devices	SIM Zigbee battery	2	SIM Zigbee battery	1	METSIM6BZ
		1	Enclosure	1	



The Schneider Electric Simple Energy Management Solutions in this brochure belong to the Schneider Electric family of solutions developed to optimize WAGES (water, air, gas, electricity, steam) management. Whether you're running a small hotel or a large corporation, the right solution for your buildings and your needs is now available.



Simple Energy Management Solutions are particularly well-suited for buildings, but they can also be implemented for other types of facilities with similar needs, such as water treatment plants, for example.

> Make the most of your energy

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Due to changes in standards and equipment, the specifications in this document are binding only after confirmation in writing by Schneider Electric.

Design: pemaco

Photos: