Give your buildings a new dimension
Achieving high energy efficiency in commercial buildings

“Give your buildings a new dimension” offers digital solutions to commercial buildings aiming to save costs and reach higher energy efficiency.

Use case description
It is not easy to achieve top performances and all buildings have significant opportunities for reduced energy costs.

The connected solution should fit in installation of small and single site commercial buildings, where only a few “plug and play” devices are desired to improve performances and sustainability.

The simple cost-effective solution provides the user with several advantages. By closely monitoring on premise all branches and consumptions, inefficiencies are spotted, and operational costs significantly reduced. Also, small buildings become eligible to benefit from funds supporting compliance with higher electrical energy efficiency class.

PROPERTY OWNER

Ensure fast payback and provide compliance with energy efficiency standards

INSTALLER

Increase awareness and visibility on utilities consumption, make energy flows and costs transparent to remove inefficiencies

FACILITY MANAGER, MAINTENANCE PROVIDER

Receive notifications of alarms and improve system reliability

DESIGN CONSULTANT

Increase value of facility and sustainability score

ENERGY MANAGER, TENANT

Few plug and play devices to save up to 30% installation time
“Give your building a new dimension” ABB solution

The proposed solution includes CMS700 and ABB EQmatic. On the one hand, CMS700 measures electrical parameters from all branches through the sensors and a dedicated CMS bus ensuring proactive notifications of abnormal situations. Data of up to 96 sensors can be captured simultaneously.

On the other hand, ABB EQmatic collects measurements from energy, water and gas meters via M-bus, providing explicit identification of the different consumptions. All pieces of information are then transmitted to an ethernet switch and are displayed on the dedicated web server. Both real time and historical values are available.

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**Suggested connection diagram**

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**Shopping list**

<table>
<thead>
<tr>
<th>Components</th>
<th>What it does</th>
<th>Quantity</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to the system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS700</td>
<td>Control unit and sensors for branch circuit</td>
<td>According to number of lines to be monitored</td>
<td>Click <a href="#">here</a> for more information</td>
</tr>
<tr>
<td></td>
<td>monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ABB EQMATIC</td>
<td>Collects consumption data from electricity,</td>
<td>According to number of lines to be monitored</td>
<td>Click <a href="#">here</a> for more information</td>
</tr>
<tr>
<td></td>
<td>water and gas meters and analyses in the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>web-server</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connected devices</td>
<td>ENERGY METER</td>
<td>According to consumption points to be monitored/billed</td>
<td>Click <a href="#">here</a> for more information</td>
</tr>
<tr>
<td></td>
<td>Provides fundamental measurements to monitor and electricity consumptions and costs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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