

APPLICATION NOTE

# 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.

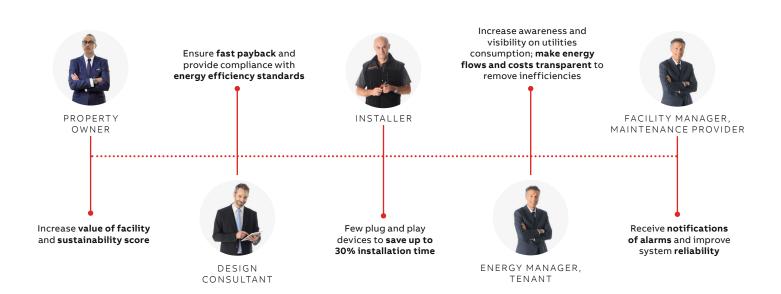
#### Use case description

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.

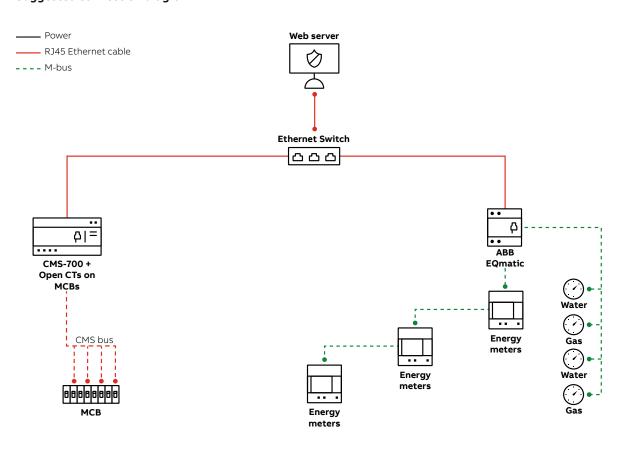


### "Give your building a new dimension" ABB solution

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.

#### Suggested connection diagram



## **Shopping list**

Components		What it does	Quantity	Additional information
Connection to the system	CMS700	Control unit and sensors for branch circuit monitoring	According to number of lines to be monitored	Click <u>here</u> for more information
	ABB EQ MATIC	Collects consumption data from electricity, water and gas meters and analyses in the web-server	According to number of lines to be monitored	Click <u>here</u> for more information
Connected devices	ENERGY METER	Provides fundamental measurements to monitor and electricity consumptions and costs	According to consumption points to be monitored/billed	Click <u>here</u> for more information