

# **Use Case School Building**





Batteryless wireless switches control lighting and shading



Batteryless wireless temperature and humidity sensors govern HVAC systems



 $CO_2$  sensors monitor indoor airquality



Occupancy sensors trigger lighting and climate control systems



Networked smoke sensors set off fire alarms to trigger emergency response



Batteryless wireless window contacts monitor window status



Batteryless wireless door/window handles monitor door/window status



Actuators control heating, ventilation and shading



Wireless actuators control radiators



Batteryless wireless control units allow for optimal climate conditions and maximum operating comfort







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### And these are the benefits for

### **Architects**

- Maintenance-free, interoperable wireless sensors
- Freely positionable products which can be placed on glass, stone, wood or furniture as required
- Flexible room configuration

### **Specifiers**

- Simplified planning and high flexibility through freely positionable devices
- Interoperable products
- Compatibility with other building automation systems (KNX, LON, BACnet, TCP/IP)

# System integrators / Contractors

- Speedy, flexible installation & system start-up
- No cabling, no drilling, no noise/dust/dirt
- Simple retrofit during undisturbed operation

## **Investors / School Authorities**

- Reduced cost of installation and operation
- Flexible space planning and easy restructuring
- High energy savings
- Interoperable and scalable standard solutions

## **Facility Managers**

- Flexibility, no maintenance needed
- Optimized servicing
- Effective manpower use
- Increased safety levels
- Faster reaction to system faults
- Reduced noise/dust/dirt
- Interoperable and scalable standard solutions

# **Facility users**

- Enhanced comfort
- Pleasant learning environment with good air quality

### References



Zentrum für Virtuelles Engineering ZVE (Germany)



Sir Isaac Newton Academy (UK)



Georgia Institute of Technology (USA)



University of Western Ontario (Canada)