

Building management

Application: large commercial buildings (> 5000 m²)

Combine various control systems to achieve maximum savings

“ We want our new head office to be as energy-efficient as possible while delivering the level of comfort our employees need. One goal we have is to reduce operating costs and secure green certification for our building. ”

Install a multi-technique Building Management System (BMS) to supervise heating, cooling, air conditioning, ventilation, power, elevators, plumbing, access control, lighting, and blinds

The solution is built around a TAC Continuum™ supervision system and subsystems made up of gateways and command-control devices for different applications:

- An SMI system for window blind control
- A DALI system for lighting control
- Xenta controllers for the air conditioning system
- An access control and video surveillance system

Heating is programmed on an hourly basis and setpoints are checked to ensure that building temperature is lowered at night and raised before occupants arrive in the morning. Presence detectors plus automatic lighting shutoff functions with re-start capabilities provide further energy savings even when employees work after normal office hours.

Daylight and presence detectors are used to optimize regulation of lighting and air conditioning in each individual office. Lighting, window blind, and cold beams are managed by system scenarios such as presence, natural light, arrival (first occupant), departure (last occupant), and others.

The solution enables facilities managers to view the status of, monitor, and operate all systems throughout the building, including alarms, temperatures, faults, on/off, and more.

The TAC Continuum system offers a display detailing energy consumption throughout the building, providing the specific information needed to raise occupant awareness of energy consumption and savings.

Solution

Benefits

For the user

> **Achieve 30% energy savings** by controlling the entire installation and raising occupant awareness of consumption

> **Pinpoint areas for potential energy savings**

> **Enhance employee working conditions**

> **Project a high-tech, environmentally-aware image**

For professionals

+ Reconfigure workspaces without recabling

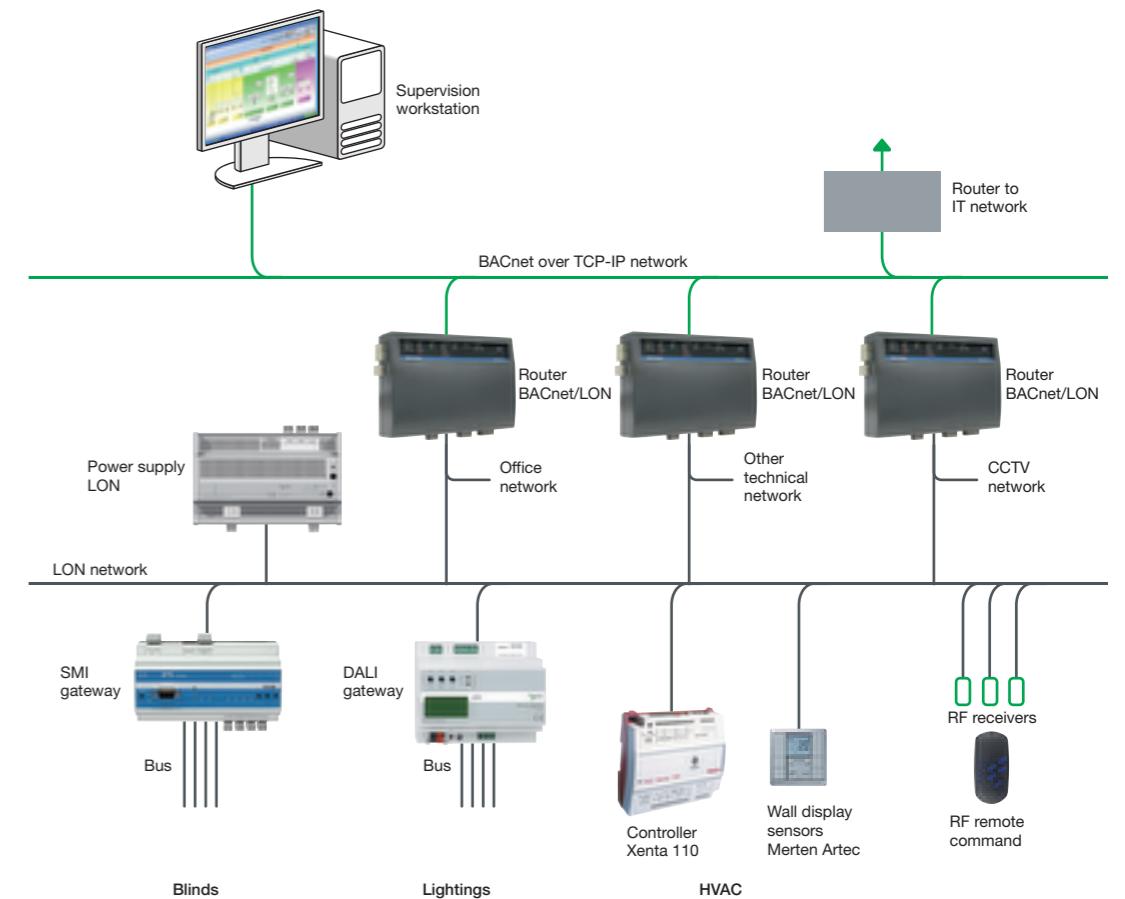
+ Enjoy the convenience of standard lighting (DALI) and motor (SMI) interfaces

+ Use lighting and ballast status information to help reduce maintenance costs

Example of Schneider Electric headquarters

Schneider Electric recently built a new head office just outside Paris, France. The six-storey building offers 35,000 square meters of office space for 1,700 employees. After the November 2008 move-in, the building generated energy savings of €250,000 over a five-month period—that's 35% savings off the previous head office's energy bills.

- ☑ Measure
- ☑ Reduce energy consumption
- ☐ Reduce energy costs



Example of display screens in the Schneider Electric Headquarters



The LON DALI-Gateway can be connected to four DALI control units. Up to 256 devices, divided into 64 DALI groups, can be connected.



The LON SMI Controller (Gateway) has four SMI-outputs to control up to 16 SMI-Slaves (motors) each. Up to 64 SMI motors can be controlled.

