Creating a relaxing, comfortable environment for guests is easier with a building automation system (BAS). These provide centralized control of all of your key HVAC, and lighting needs. Not only can BAS provide a high level of control, but it can also deliver real-time data from each guest’s room. Compiling and analyzing that data of actual energy use (from the lighting to the in-room temperature controls) can help energy and facility managers make smart, informed energy-use decisions.

Key components of BAS in hotels

**Lighting controls:**
Occupancy and vacancy sensors adjust lighting based on activity. Particularly effective for guest rooms, public restrooms, conferences rooms and storage rooms, these ensure lights are on only when they need to be, saving energy. Daylighting sensors measure light levels and dim or switch artificial lighting in response to control signals. These are ideal for main lobbies and restaurants. Taking advantage of daylight can make a space brighter and more appealing while also saving energy.

**HVAC controls:**
Guest room energy-management controls, which are part of a BAS, determine when a room is unoccupied and adjust HVAC system settings to save energy. When guests return to their room, the system adjusts settings to meet their comfort requirements. Control options include occupancy sensors, key card extraction and door switches. These controls can be installed in existing buildings without significantly altering wiring configurations or disrupting the HVAC system. For smaller hotels and motels, vendors claim to reduce packaged terminal air Conditioner (PTAC) energy use by up to 35% or more through the combined power of the in-unit energy management system (EMS), programmable thermostat temperature set-back and door occupancy sensor.

Whether you’re a facility manager or energy-management leader at a hotel, manufacturing plant or university, BAS can help reduce your energy costs, create a green image and even lead to competitive advantages.