Smart Automation, Smart Building

What Is Building Automation?
Building Automation is an idea of using a control system to monitor and command the mechanical, lighting, security control, or fire alarm systems in a commercial building. The computerized, intelligent network functions to keep building temperature within a specified range, control lighting, monitor performance of all systems, and send out alarm signals to maintenance engineers or administrators when failure occurs.

Why Building Automation?
Making a building smart not only saves cost and energy, but also improves security and event response time. Given the economic situation at the moment, saving costs on electricity bills, and maintenance fee is a major issue. This also helps in saving energy, keeping green promise to our planet Earth.

Door controls is also one of the applications in building automation. Security therefore can be tightened up when people who access into the building are being monitored and logged. Also with the fire controls management system, an alarm will be quickly set off once the system picks up any sign of a fire breaking out, giving people in the building extra security by having a short even response time.

What Is Included in Building Automation System?
There are many controls in a building that can be included in a Building Automation System. HVAC controls, lighting controls, electricity controls, hot water controls, fire controls, access controls, security/surveillance, and broadcast controls are commonly seen in a Building Automation System. The Building Automation System can be programmed to manage these controls, such as turning lights off automatically when no occupancy in the building, turning on air con when the room temperature reaches a specified temperature, sending video streams from surveillance cameras to the security room every specified period, or logging access records when personnel comes in and out the door.

What Is The Topology for a Building Automation System?
Most building automation networks consist of a primary and secondary level. Primary level mainly gathers data from the secondary level devices and sends out commands for managing the controls inside the building. Several kinds of buses can be used to set up the entire network, including serial (RS-232/485), optical fiber, Ethernet, or even a wireless interface.

Nowadays with strong bandwidth demands by video streams from surveillance systems, gigabit Ethernet switches and wireless LAN devices are more ideal for Building Automation than serial devices.

An Example of Building Automation
Ethernet Direct offers industrial gigabit Ethernet switches, fiber switches, and also wireless LAN products for Building Automation cases. More building owners are adopting totally-integrated solutions to make the work place more comfortable, react automatically to weather conditions and protect people, data and business processes from burglary, theft and fire. Intelligent Building Solutions increase comfort, energy efficiency, security, higher productivity, protection of investments and overall reliability of technical infrastructure. The Gigabit backbone integrates all the key building services to facilitate intuitive processes for the management of the entire system.
About Ethernet Direct Corporation

Ethernet Direct brings a control system engineering perspective to networking technology. The principals of Ethernet Direct come from process-control and PLC system backgrounds.

The Global Ethernet Direct team covers operations from Product know-how, design implementation, quality assurance, manufacturing, logistics, sales, marketing & technical support. We are well-positioned to fulfill customers' needs and markets' demands by providing a great variety of tailor-made products and services. When you work with us, you will experience confidence and dependability. By choosing Ethernet Direct, you have chosen excellence & long-term commitment.

Our corporate headquarters is located in Taiwan with Ethernet Direct Partners across United States, Canada, Asia Pacific, Latin America, Europe, and Middle East.