Case note Integration is at home

Home-automation designed and built in an eco-sustainable villa: user-friendliness, aesthetics and cutting-edge features



Context

Applying the built-in home automation, safety & security system, video surveillance and video recording to a newlyconstructed villa, designed and built according to the most advanced eco-sustainable design criteria.

Description

The client request was to equip the building with the most modern technical solutions combined with ease-of-use. The client feared the risk of investing in technology and solutions that would later prove unmanageable and impractical. Furthermore, the human-machine interface devices had to integrate architecturally to contribute to the aesthetic enhancement of the environment. Finally, the system had to allow its user to have a public interface network that replicated the touch-screen control from a remote PC.







Solutions adopted

The technical collaboration between ABB and SAET has contributed decisively to the creation of a system which takes into account and satisfies all customer requirements. Easy and rational management of the system was possible by adopting the SAET GEMSS Integrated Supervision System. The solution for the integrated management of the building is based on a number of subsystems ranging from automation and security to temperature control. The centralized control of all electrical equipment is assigned to bus devices. Lighting (on, off, dimming) and closing (roller blinds, external blinds and overhead) are controlled using modular devices on bus. The preset scenarios enable activating functions according to the different times of the day. The sensors placed at all the access points to the residence, both external and internal, are linked to devices that are part of the SAET anti-intrusion system. These components are able to detect any attempted burglary in real time. The GSM/ GPRS interface technology enables the prompt notification of all incidents by telephone and text messaging, and the sending of remote commands via SMS. The external areas of the building have fixed 24-hour video surveillance that provides high quality and definition under any lighting condition. The GEMSS Supervision System is the user tool interface that enables the monitoring and management of all the subsystems described above. The application, installed on four touch-panel PCs distributed around the villa, offers a user interface with graphical maps that guarantee immediacy of information and ease of use.

Advantages

By using the touch-screen, the user can monitor and control all the subsystems at the same time: from the opening and closure of curtains and external blinds to turning on and off of lighting, from controlling the anti-theft alarms to surveillance functions. The ability to define specific scenarios eases manageability, allowing you to send commands to the individual subsystems with a single user interface. The GEMSS Client installed on the PCs of the building ensures a precise reproduction of the graphics layout available on the touch screen.

ABB SACE A division of ABB S.p.A. Home & Building automation

Viale dell'Industria 18 20010 Vittuone (MI) - Italy Tel.: +39 02 9034 1 Fax: +39 02 9034 7609

www.abb.com

