Security is more than just locking

The ELM electronic locking and monitoring system is dedicated for IT infrastructures. It uses CAN communication to communicate between the different devices, in order to reduce installation effort.

The lockable and monitored racks are linked by a CAN network to the central ELM control unit (Photo: Emka)

EMKA (GERMANY) HAS DEVELOPED A LOCKING AND MONITORING SYSTEM. It comprises biometrical access control units and RFID card readers as well as temperature sensors and smoke detectors. The CAN communication is used to link the user modules featuring keyboard and GSM functionality, sensor modules, control modules, and the communication module.

The CAN modules are equipped with standardized connectors for sensors, handles, etc. (Photo: Emka)

Each control module provides eight handles. The handles are equipped with an integrated keypad. All locks have potential-free contacts for remote indication of handle status (locked/unlocked). The communication module comes with PC interface, EIA 232 port, and Ethernet link. The access control can use PIN codes, RFID cards or GSM for remote opening via mobile phone.

The sensor module features four sensor inputs and four contacts. There are temperature, humidity and leakage sensors for climate control as well as smoke and vandalism sensors for signaling immediate risk. Other sensors for electrical parameters (current, voltage, and power) are available as well.

The modules are linked to a central control unit via the CAN network. Handles, locks, sensors, or card readers are plugged into the related modules using connectors. The modular design and the standardized connectors ensure according to the provider easy installation and fast commissioning. The decentralized system architecture reduces the necessary wiring costs. Additional modules can be hooked up via the CAN network to extend the capability of the starter package. Of course, the rack management system comes with a software package. For larger systems with a huge number of racks or racks installed in different locations an ELM proxy server is available.