

## INTELLIGENT COMMUNICATION SYSTEMS



Tailored solutions for control and monitoring. Ventilation and air conditioning components must communicate with each other, only then can they also work together perfectly. This is even more important when they should ensure the safety of people and equipment. Intelligent communication systems allow for data to be retrieved, collected, displayed and monitored via the central BMS. Systems are constantly being monitored to ensure their functional reliability.

The TROX TLT fan diagnosis system is a special tool for smoke exhaust systems and allows for analysing the condition of a fan with regard to wear and performance via a remote function. Maintenance intervals can be extended as a consequence, a fan need not be replaced before its time: this saves costs.

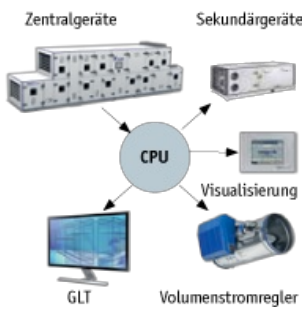
For fire protection and smoke control, TROX relies with its TROXNETCOM system on AS-i communication at the field level. AS-i uses a two-wire cable for data and energy and ensures interference-free transmission. Due to the free network topology the system can be ideally adapted to different buildings. With up to 1736 participants in an AS-i network, TROXNETCOM is suitable for projects of every size. The combination of voltage supply and data communication with a single cable reduces not only the wiring effort; fewer cables mean also a reduced fire load.

Room balancing, room pressure control, room temperature control, and intelligent monitoring.

To maintain stable room conditions including the required air change rate, room pressure and room temperature, all extract air and supply air flow rates must be measured and communicated between the system components.

In laboratories but also in production processes where hazardous substances are handled, it is important that the building automation system is provided with the actual room air values. The TROX room management system allows for linking all network participants via an integral communication line and by using plug and play such that a continuous data exchange between these participants is ensured. The system can easily be connected to the central BMS using the standard communication interfaces LON, BACnet, or Modbus; IP-based communication with Ethernet is also possible.

## TROX AIR MANAGEMENT SYSTEM



- Room management function: All parameters and functions for a room can be configured with one controller
- BMS interfaces: LON, BACnet, Modbus, IP-based webserver
- Plug and play: Automatic data exchange between the controllers; no addressing required; interactive commissioning
- Easy maintenance, room diagnosis and room configuration
- Rapid and precise control to maintain setpoint values
- Modular hardware