

MICROSENS



MORE THAN JUST A NETWORK

DECENTRALISED FIBER NETWORKS WITH AN EDGE

SMART I/O CONTROLLER

Analogue and digital versions available

Simple integration of conventional analogue and digital components into an IP Network

10 inputs and 8 outputs per I/O controller

Reduced cabling for switches, sensors and actuators

Integrated power supply for sensors and actuators

No separate power supply needed for connected sensors and actuators

10/100 uplink

High-performance uplink with 10/100 Mbit/s in the IP network

Flexible power supply of the I/O controller

Power of the controller supplied with 24 VDC or Power-over-Ethernet

Convenient management

Easy Management via MICROSENS Smart Director App

MQTT

MQTT client for sending and receiving MQTT messages from and to an MQTT broker integrated in firmware

Made in Germany

Development and production in Germany guarantee top quality and support



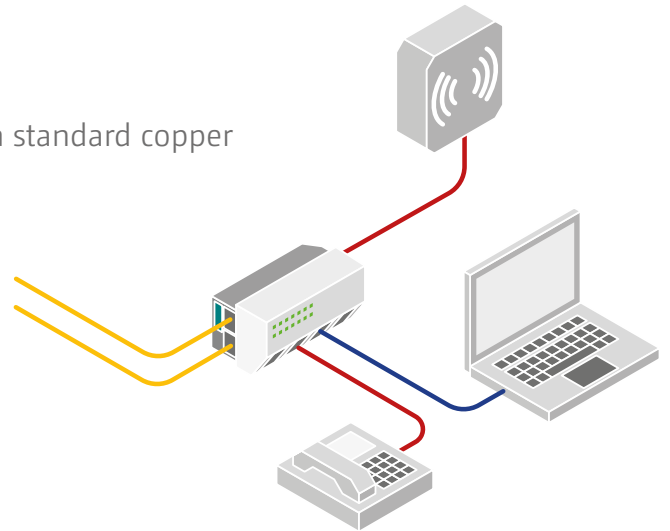
Interface between building automation and IP networks.

FUTURE PROOF, SUSTAINABLE, LOW CAPEX & OPEX

The 'embodied carbon' of a fiber network compared to a standard copper network is 88% lower.

Advantages of Fiber To The Office:

- 2.5 times greater bandwidth than copper networks
- No decentral comms rooms – more space to use/let
- Up to 75% less cables compared to SCN
- No separate cabling for WiFi required



IP-BASED BUILDING MANAGEMENT

Advantages:

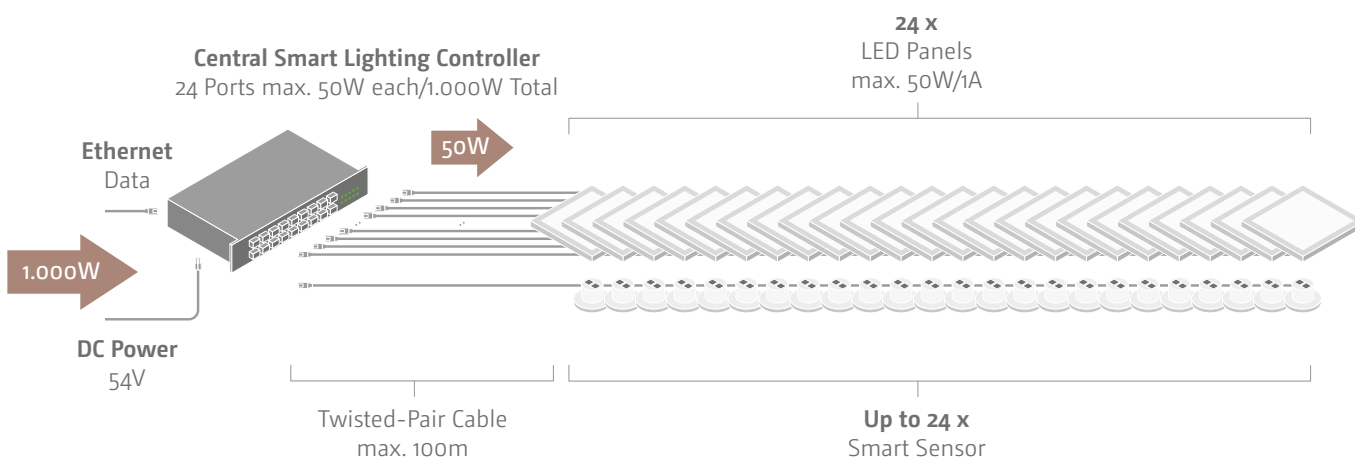
- One network and one protocol for Data, Lighting & building automation
- Secure & encrypted communication
- Low voltage only
- Easy planning, installation and expansion - room by room
- Support for Modbus TCP/IP and MQTT communication protocols



DC-LIGHTING

Advantages of DC-Lighting:

- The solution is IP-based (secure)
- Direct current requires fewer converters (AC/DC). This is more efficient and saves a lot of maintenance.
- Optimal use of solar energy & storage in batteries (inverters only needed to supply power to the grid)
- Uses low voltage only



SMART SENSORS

Smart Radar Sensor



Integrated sensor for brightness, movement, temperature and humidity

Smart Radar Sensor (Bluetooth Beacon)



Integrated sensor for brightness, movement, temperature and humidity, incl. Bluetooth Beacon

Smart Radar Sensor (Air Quality)



Integrated sensor for brightness, movement, temperature and humidity, incl. VOC sensor

Smart Radar Sensor (Air Quality + Bluetooth Beacon)



Integrated sensor for brightness, movement, temperature and humidity, incl. VOC sensor and Bluetooth beacon

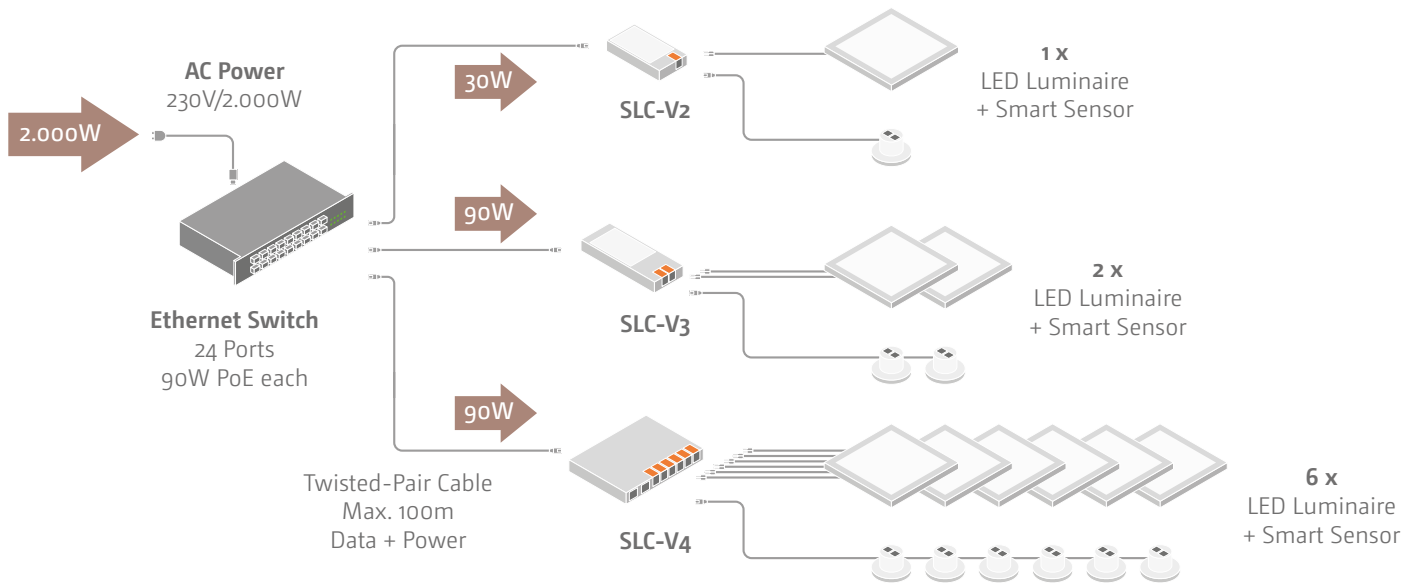
Smart Matrix Sensor



Integrated infrared matrix sensor for measuring the room temperature and movement. Additional sensors for ambient light, humidity, temperature and air quality

POE-LIGHTING

MICROSENS



Advantages of PoE-Lighting:

- The solution is IP-based: secure
- Uses low voltage only
- Easy installation, room by room
- Network and lighting use the same cabling infrastructure



Demand-based air handling:

Air quality measurement enables demand-based control of ventilation and air conditioning systems to save energy.

Adaptive temperature control:

Real-time air quality data enables adaptive temperature adjustments to optimise comfort and reduce energy consumption.

Efficient air purification:

Measurements of particles and pollutants help, optimise the efficiency of air filtration systems.

Avoidance of over-ventilation:

By monitoring the air quality, unnecessary ventilation is avoided, which reduces energy consumption.

Optimising air circulation:

Air quality measurements help to identify areas with poor air quality and enable targeted management of ventilation systems.

MICROSENS STANDS FOR COMPETENCE IN ACTIVE NETWORK SOLUTIONS

For more than 30 years the manufacturer MICROSENS focuses on communication via fiber optic based networks for enterprises, manufacturing plants, industry and access networks. The development and manufacturing „Made in Germany“ contribute significantly to this.



 Made
 in
 Germany

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