

# LCN-UP24

## Universal 24V Sensor Module for Patress Boxes

### Functional Specifications:

#### Operating Programme:

Three simulated outputs: three timers (10ms .. 40min) enabling momentary timers, staircase lighting, etc.

All 3 outputs have the possibility to store up to 100 light scenes. (each storing brightness and blending time)

Connection for 8 keys (with adapter cable LCN-T8) which can distinguish the **Hit**, **Hold** and **Release** function: each of the 3 commands can be sent to 2 addresses (modules or groups).

With the adapter LCN-TE standard EIB key sensors can be connected. Support and parametrization of the LED's on standard EIB key sensors.

In total 32 keys in 4 tables = 192 commands to 64 target addresses.

LCN Tableau function/Panelboard with 4 states: **On**, **Off**, **Blink** and **Flicker**. Four summing operations with 12 logic inputs for each and hierarchal fault signal processing in compliance with DIN.

Decoding of the IR receiver. Evaluation direct or over main computer. Functions for key levels, ciphered transmission, transmission distinction, transponder (evaluation of serial numbers), personal identification.

Further functions :

- Two freely parametable continuous action controllers. Results and any variables can be distributed on the bus
- Analogue value data processing over 5 thresholds with hysteresis, also can be used for control, counting/calculating
- Transponder data processing for up to 16 transponders (unlimited amount with use of the visualization software)
- Control with independent and logic operation, single key locking and unlocking, hierarchical reporting
- Four timers (1s.. 45 days), cycling clock generator
- Override during power failure for up to 20 sec with power failure recognition, etc.
- Four level reporting and acknowledgement
- Function reporting: execution of commands are clearly confirmed
- Automatic creation of status reporting for the visualization
- Constant monitoring for over temp and overloading of peripherals with automatic shutdown
- Status reporting (self monitoring)

### Hardware equipment:

24V PSU (Voltage range 26V~±20%/50Hz)

T-Port for connection of up to 8 keys via key converter LCN-T8, or LCN-TEX, etc.

I-Port for combined connection of LCN-RR (IR-remote-control receiver), LCN-TS (temperature sensor), LCN-BMI (motion detector), LCN-UT (transponder reader) etc.



### Description:

The LCN-UP24 concealed module is a sensor module for the LCN Bus and operates at low voltage, 24V~. The connection to the bus is 100% compatible with the LCN standard. It has the same functions as the LCN-UPS. Furthermore through its T and I ports additional sensors and actuators can be connected.

Parameters for the internal operating program can be set using the system software LCN-P or LCN-PRO.

The module is installed behind switches in the wall using deep patress boxes or at distribution junctions.

### Field of application:

- Biologically friendly installation : Avoidance of electro-smog
- Economical connection for LCN sensors and EIB push button key sensors.
- Individual room control: Cooling, heating and venting.
- Access control with IR remote control and transponder.
- Automatic control with many timers and logic operations.
- Tableau/Panelboard installations with 4 states/LED and hierarchal logic for reporting and displaying.
- Alarm systems also with more zones and complex requirements supervised loop, pre alarms etc.
- Logic operations over trade boundaries: passing over: Lighting ↔ Shading ↔ Alarm ↔ Entry, etc = Cost efficient functionality by multiple use of sensors and actuators.

**Note** : All functions can used independently and are also available to be used simultaneously.

### Note:

24V ac supply needed e.g. a simple 24V ac transformer can be mounted in the distribution box.

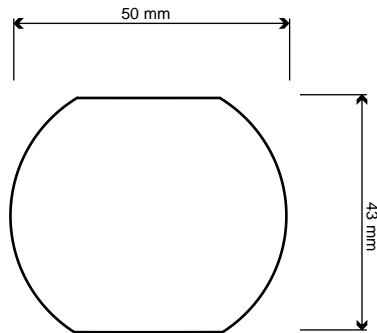
Modification of the LCN-UP24 for Merten Tracent (6231 90) is to be stated when ordering.

# LCN-UP24

## Universal 24V Sensor Module for Patress Boxes

### Dimensions:

Case Mass (Ø x H): 50 x 20 mm



### Technical Data:

#### Connection:

Supply voltage: 26V~ ±20%, 50Hz /60Hz  
Input power: <0,4W power consumption

Supply Connection: Litz wires 0,75 mm<sup>2</sup> (with insulated ferrules)

Temperature control: Yes

Electronic outputs: Not available but internally simulated: so, timer, etc. usable

#### Ports:

T-Anschluss: Available  
I-Anschluss: Available

#### General Details:

Operating temperature: -10°C to +40°C  
Humidity: max. 80% rel., non condensing  
Environmental conditions: Stationary installation according to VDE 632, VDE 637

Safety classification: IP 20, when installed in patress box

### Assembly:

de-centralized installation  
in deep wall patress boxes

### Circuit Diagram

The transformer can be installed centrally in the distribution box in order to supply a number of LCN-UP24 modules.

For combined use 230V~/24V- there are two possibilities.

- Economical but not galvanically separated. One of the connectors from the 24V transformer is connected to neutral therefore the 24V module and the 230V module share the same reference point.
- For full galvanic isolation the bridge is removed and both the 24V and 230V buses are coupled using an isolation transformer. LCN-IS, LCN-IS24.

