

Datasheet

Subject to technical alteration
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thevios[®]



» APPLICATION

As part of the theGRID, up to eight thevios satellites can be connected to a thevios HUB via the theGRID bus. This allows a wide range of sensor data to be collected, which can be used, among other things, for the intelligent control of lighting and air conditioning depending on occupancy and environmental conditions.

Optional flush or surface mounting allows flexible integration into a variety of interior scenarios. With tool-free wiring and communication via the theGRID bus, the thevios satellite is already one of the most future-proof solutions for increasing energy efficiency, comfort, and productivity.

» TYPES AVAILABLE

Ceiling sensor (Satellite) – theGRID Bus

- thevios Sat OCC LUM
- thevios Sat OCC LUM rH
- thevios Sat OCC LUM rH IR

» INTENDED USE

Ceiling/room sensor for measuring type-dependent variables with theGRID bus interface. Must not be used in conjunction with devices that serve directly or indirectly to protect health or life, or whose operation could pose a risk to people, animals, or property.

Intended for use only as specified. Unauthorized modification or alteration is prohibited!

» SECURITY ADVICE – CAUTION



The installation and assembly of electrical devices (modules) may only be carried out by an authorized electrician. Devices with a power connection may only be connected when the connection cable is disconnected!

Always comply with:

- Laws, standards, and regulations
- The state of the art at the time of installation
- The technical data and operating instructions for the device

» NOTES ON TEMPERATURE SENSORS (ACTIVE)

Sensors with electronic components always have a dissipative power, which affects the temperature measurement of the ambient air. The dissipation in active temperature sensors shows a linear increase with rising operating voltage. This dissipative power has to be considered when measuring temperature. In case of a fixed operating voltage ($\pm 0,2$ V) this is normally done by adding or reducing a constant offset value.

Thermokon transducers can be operated with variable operating voltages. The transducers are set at the factory with a reference operating voltage of 24 V =. At this voltage, the expected measuring error of the output signal will be the least. Other operating voltages, can cause a measurement deviation changing power loss of the sensor electronics.

A recalibration can be carried out directly on the unit or via a software variable (app or bus).

Remark: Occurring draught leads to a better carrying-off of dissipative power at the sensor. Thus temporally limited fluctuations might occur upon temperature measurement.

» NOTES ON HUMIDITY SENSORS

At regular environmental condition, it is recommended to calibrate the sensor annually to check the compliance with the accuracy required in the application. The following conditions can damage the sensor element or lead in long term to loss of the specified accuracy:

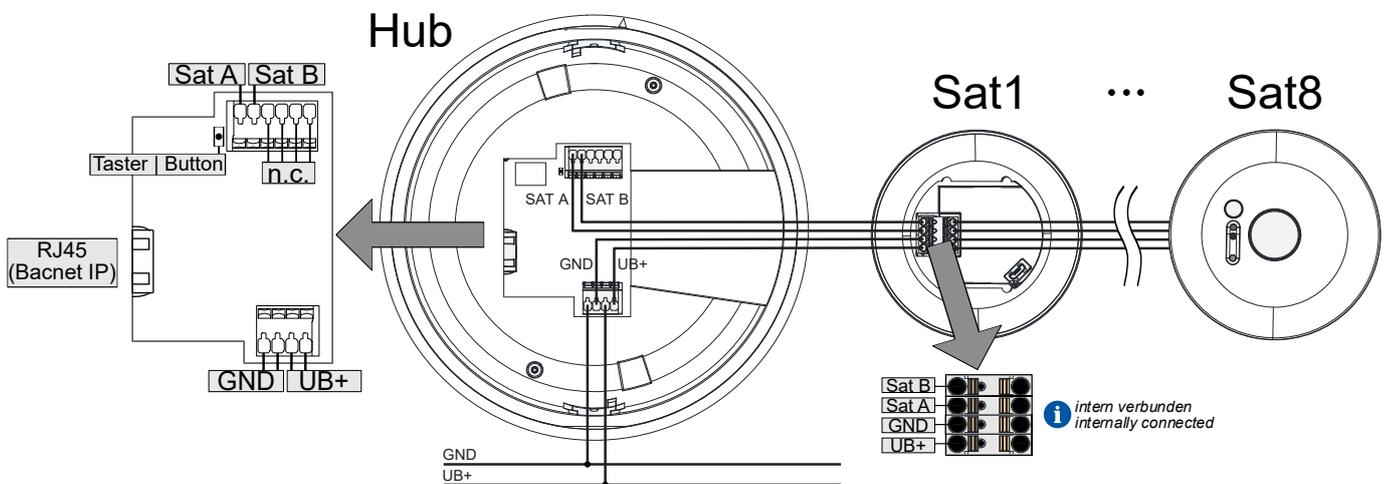
- Mechanical stress
- Contamination (e.g. dust / fingerprints)
- Aggressive chemicals
- Ambient conditions (e.g. condensation on measuring element)

Re-calibration or exchange of the sensor element are not subject of the general warranty.

» TECHNICAL DATA

Measuring values	Movement, luminosity, optional: temperature, rel. humidity, radiation temperature (temp-IR)
Network technology	theGRID Bus (RS485 Slave)
Power supply	24 V = ($\pm 10\%$) SELV
Connection electrical	Entnehmbare 1,5mm ² Steckklemme (2x4), loop-through wiring compatible
Connection BUS	theGRID: 2-Draht RS485 BUS
Power consumption	0,4 W max.
Motion detection range	Detection angle 96°, with a ceiling height of 2.7 m, this results in a circular detection area with approx. D=6.0 m.
Measurement range brightness	0..1000 lux
Accuracy brightness	$\pm (15 \text{ Lux} + 8\% \text{ of measured value})$ Field calibration required
Measuring range temperature	0..+50 °C
Accuracy temperature	$\pm 0,5 \text{ K (typ. at } 21 \text{ °C)}$
Measuring range humidity	0..100% rH non condensing
Accuracy Humidity	$\pm 2\%$ between 10..90% rH (typ. at 21 °C)
Measuring range radiation temperature (optional)	0..+50 °C
Accuracy radiation temperature (optional)	$\pm 0,5 \text{ K (typ. at } 21 \text{ °C)}$
Enclosure	PC V0, pure white
Protection	IP30 according to DIN EN 60529
Ambient condition	0..+50 °C, max. 85% rH non condensing
Mounting	Ceiling installation, mounted flat in flush-mounting box ($\varnothing=2.36\text{in.} \mid 60 \text{ mm}$) or surface mounting (with optional surface-mounted housing)

» CONNECTION PLAN THEVIOS SAT



» CONFIGURATION



A USB cable with micro USB is required for direct communication between the thevios-Sat and a Windows PC.

The address of the thevios-Sat can be set using the uConfig configuration software (Windows 10 or higher required). Configuration is carried out while the device is powered up.

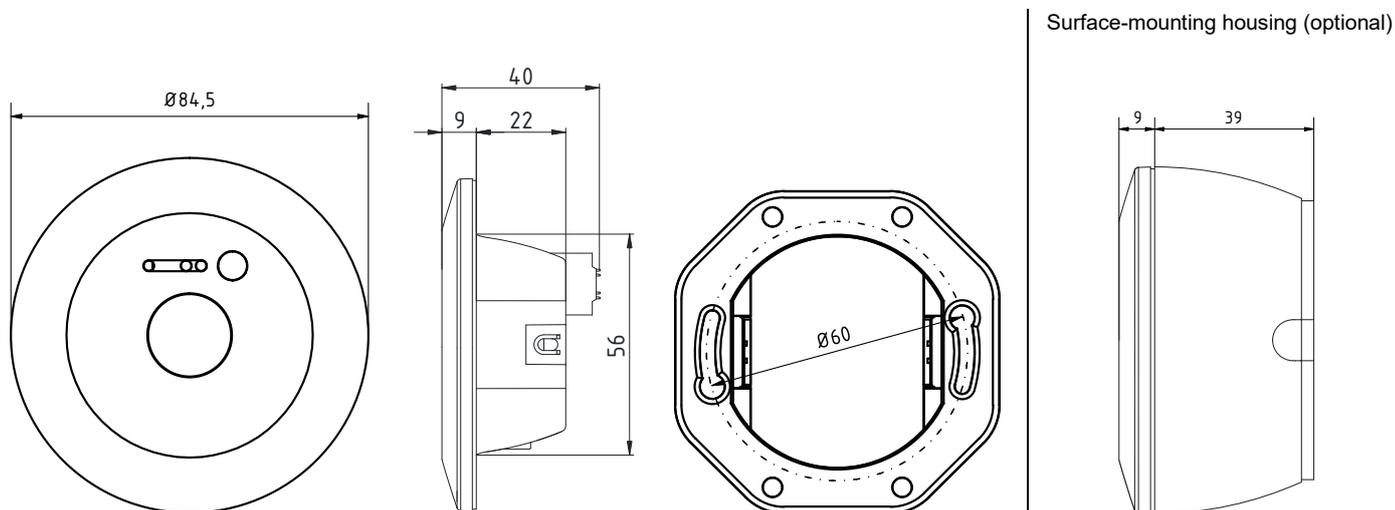
Thermokon uConfig is available for download on our website:

<https://www.thermokon.de/download>

Configuration

Configuration is carried out via the thevios Hub web interface. Further information can be found in the manual.

» DIMENSIONS



» ACCESSORIES (OPTIONAL)

Rawplugs and screws (2 pcs. each)
Surface mounting housing thevios Sat / thevios 3

Item No. 102209
Item No. 837279

» ADDITIONAL DOCUMENTS



Installation instructions
<https://www.thermokon.de/direct/files/thevios-sat-mont-de-en-all.pdf>



Manual
<https://www.thermokon.de/direct/files/thevios-hub-sat-bacnet-ip-manual-en.pdf>

» PRODUCT CONFORMITY



Declaration of conformity
The declaration of conformity of the products are available on our website
<https://www.thermokon.de/direct/en-gb/categories/thevios-sat>

» NOTES ON DISPOSAL



The crossed-out wheeled bin symbol indicates that the product or removable batteries must not be disposed of with household or commercial waste. Within the EU, you are legally obliged to dispose of the product separately and appropriately in accordance with the national laws of your country. Alternatively, please contact your supplier or Thermokon Sensortechnik GmbH. Further information can be found at: www.thermokon.com