

Kube-Sky-RHT-Lux

Wireless Transmitter

Kube-Sky-RHT-Lux is a wireless indoor temperature, humidity and illuminance transmitter. This Lux model measures the amount of light under normal room conditions, assisting in optimizing an appropriate visual environment.

With simple look, Kube-Sky-RHT-Lux will look great in e.g. office spaces or museums.

Kube-Sky-RHT-Lux uses LoRa technology which enables very long-range radio coverage in wireless battery-operated device. Device is typically used with Nokeval Cell-Sky -base station but it can also be integrated to systems with RS485 Modbus RTU.



Applications



Smart Industry



Construction

Product highlights and features

Kube Lux assists to optimize indoor lighting by providing real-time data of lighting levels

Semtech LoRa modulation technique allows unforeseen wireless range in a battery powered transmitter

Wide illuminance measurement range from 0 up to 2000 lux or wider

Easy installation, effortless in use and simple to configure



Kube-Sky-RHT-Lux



General Specifications

| | |
|-----------------------|---|
| Storage temperature | -30...+60 °C, non-condensing |
| Operation temperature | 0...+60 °C |
| Operation humidity | 0...100 %RH, non-condensing |
| Protection class | IP20 |
| Enclosure material | Plastic (PC+ABS) |
| Dimensions | 95 mm x 75 mm x 27 mm, Wall mount +1 mm |
| Weight | 130 g with batteries |
| Internal battery type | 2 pcs LR6 (AA 1.5 V alkaline) |
| Battery life | Typically 10 years (with default settings). For the estimated battery life, high quality batteries should be used, e.g. Energizer EN91. |

Radio Specifications

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|--------------------|---|
| Nokeval radio type | Sky-radio |
| Antenna | Internal |
| Center frequency | 433.3...434.5 MHz user adjustable |
| Bandwidth | max 300 kHz OBW, all transmissions fit within 433.05-434.79 MHz |
| Transmitting power | max 10 dBm E.R.P. |
| Open space range | up to 5 km |
| Indoor range | 30 to 300 m typically with default Effort setting |

External supply with USB

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|-----------|---|
| Connector | Micro USB type B 5 ±0.5 V max 200 mA, no suspend function |
|-----------|---|

External supply with a cable

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|-------------|---|
| Connector | Push-in spring connector for 0.2-0.5 mm ² conductors |
| Voltage | 5 ±0.5 V DC |
| Consumption | Average about 3 mA, momentarily max 200 mA |

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Temperature measurement

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|---------------------------|--|
| Measurement range | -20...+50 °C |
| Accuracy | ±0,5 °C in the range of +10...+50 °C |
| Step response time | Approx. 45 mins to 90% of step change, still air |

Humidity measurement

| | |
|--------------------------|--|
| Measurement range | 0...100 %RH non-condensing |
| Accuracy | Typically ±3 %RH at humidity of 20...80 %RH and at temperature of +15...+30 °C |

Illuminance measurement

| | |
|--------------------------|---|
| Measurement range | 0...2000 lux or wider |
| Accuracy | ±20 % at 50...2000 lux at 20...30 °C with a typical indoor lighting spectrum and light coming directly from front |