16321 on mounting plate with built-in level (accessory)

USER MANUAL

# 16321

## Lightness Sensor

aem | LAMBRECHT meteo

# Safety instructions

This system is designed according to the state-of-the-art accepted safety regulations. However, please note the following rules:

- Before putting into operation please read all respective manuals!
- Please observe all internal and state-specific guidelines and/or rules for the prevention of accidents. If necessary ask your responsible safety representative.
- Use the system only as described in the manual.
- Always have the manual at hand at the installation site.
- Use the system within the specified operating condition. Eliminate influences, which might impair the safety.
- Prevent the ingress of unwanted liquids into the devices.

# Warranty

**Please note the loss of warranty and non-liability by unauthorized manipulation of the system. You need a written permission of the LAMBRECHT meteo GmbH for changes of system components. These activities must be operated by a qualified technician.**

The warranty does not cover:

1. Mechanical damages caused by external impacts (e.g. icefall, rockfall, vandalism).
2. Impacts or damages caused by over-voltages or electromagnetic fields which are beyond the standards and specifications in the technical data.
3. Damages caused by improper handling, e.g. by wrong tools, incorrect installation, incorrect electrical installation (e.g. false polarity) etc.
4. Damages which are caused by using the device beyond the specified operation conditions.

# Features

- Weather resistant aluminium die-cast housing IP 65
- Integrated transmitter
- Easy mounting and adjustment by three-point plate and built-in box level
- Standard unit: Lux = lx - 100 Lux equal 1 W/m$^2$ or 9.29 foot candle
- Analog signal output
- Factory test certificate included (DIN EN 10204)

# Pin assignments

**Fig. 1 – Version:**
00.16321.010342
00.16321.010302
00.16321.010012

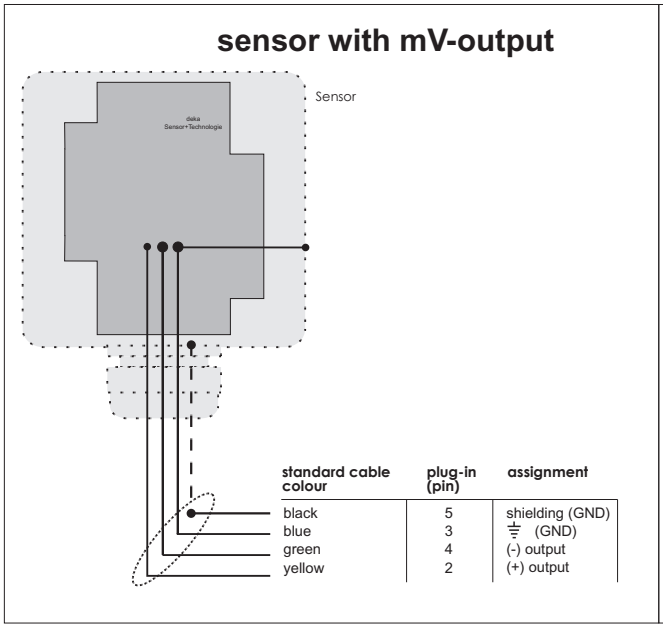



**Fig. 2 – Version:** 00.16321.010012

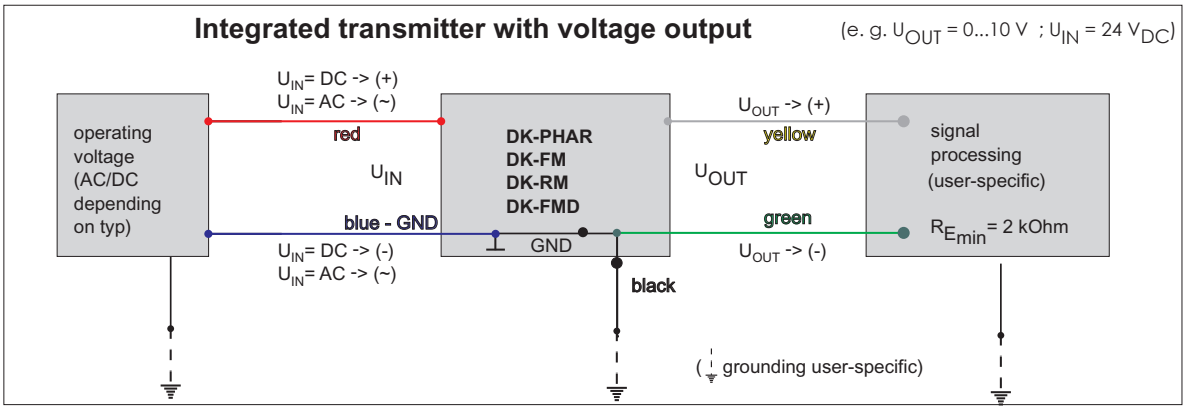
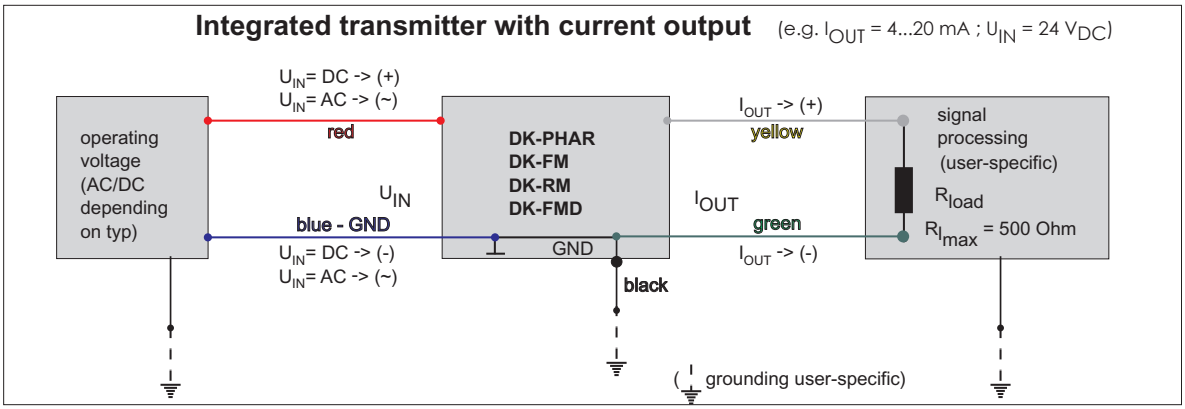



**Fig. 3 – Version:** 00.16321.010342 and 00.16321.010302




input 24 $V_{DC}$: $U_{IN_{min}}$ = (12 + 0,02 x $R_I$)V  $U_{IN_{max}}$ = 27 V

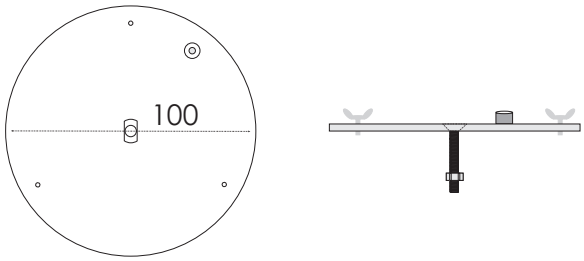
input 24 $V_{AC}$: $U_{IN_{min}}$ = 24 V - 15 %  $U_{IN_{max}}$ = 24 V + 20 %

**Attention:**
Input and output carry one-sided GND-potential !!!

# Accessories

**Please order the accessories separately.**

**Id No. 32.16321.001000**: Three-point mounting plate made of aluminum; with built-in level for horizontal alignment of the sensor; weight approx. 0.2 kg




**Id No. 33.14627.012000:** Stainless steel wall bracket; weight approx. 0.6 kg

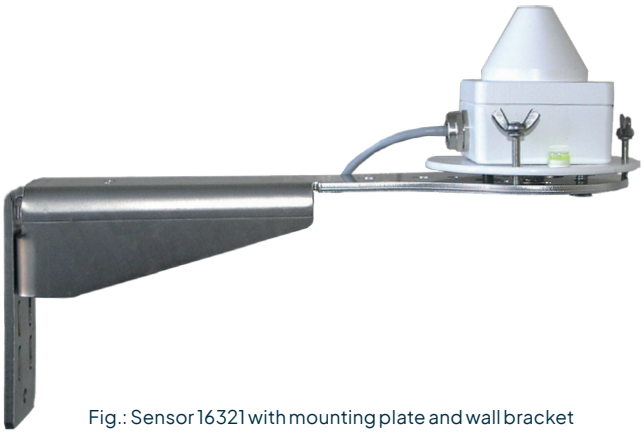
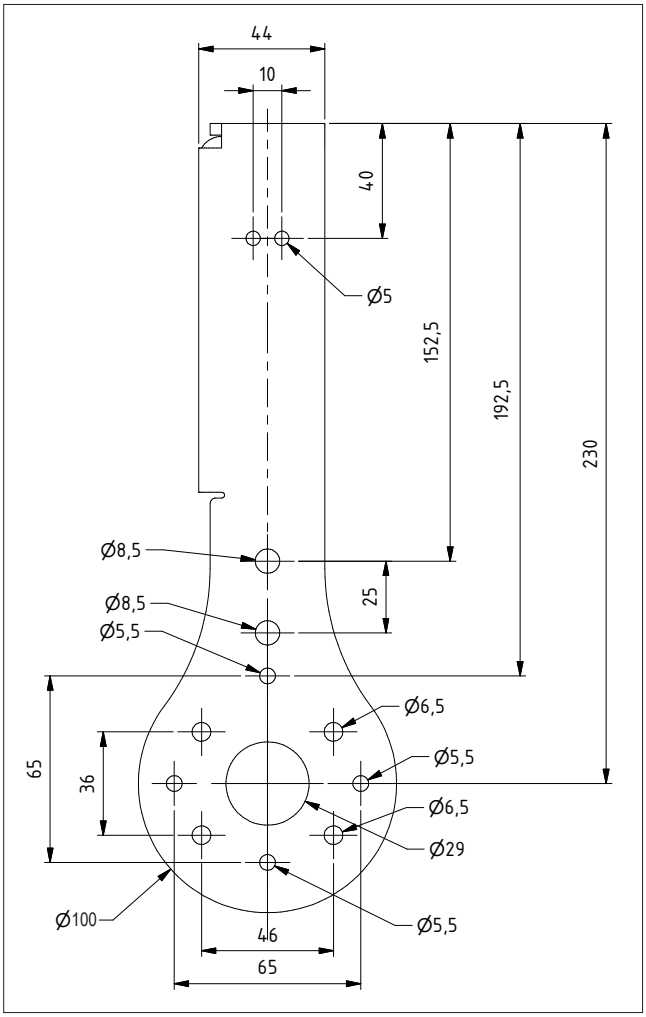


Fig.: Sensor 16321 with mounting plate and wall bracket

**Dimensions wall bracket**



# Technical data

| 16321 LIGHTNESS SENSOR | |
|---|---|
| Id No. | **00.16321.010302** (0...20 mA)<br>**00.16321.010342** (4...20 mA)<br>**00.16321.010012** (0...10 V) |
| Measuring elements | Special Si photodiode |
| Measuring range | 0...100 klx |
| Range of application | -30...+65 °C |
| Response time | < 0,5 ms |
| Inclination error | < ± 5 % |
| Non-linearity | ± 1 % |
| Output | 00.16321.010302 (0...20 mA); 00.16321.010342 (4...20 mA)<br>00.16321.010012 (0...10 V) |
| Supply voltage | 24 VDC |
| Power consumption | Max. 40 mA |
| Protection class | IP 66 |
| Dimensions/ Weight | 65 x 59 x 68 mm/ 0.3 kg |
| Included in delivery | 3.5 m cable |

# Disposal

LAMBRECHT meteo GmbH is listed and registered at the Stiftung Elektro-Altgeräte Register ear under:

**WEEE-Reg.-Nr. DE 45445814**

In the category of monitoring and control instruments, device type: “Monitoring and control instruments for exclusively commercial use”.

**Within the EU**

The device has to be disposed according to the European Directives 2002/96/EC and 2003/108/EC (Waste Electrical and Electronic Equipment). Do not dispose the old device in the household waste! For an environmentally friendly recycling and disposal of your old device, contact a certified disposal company for electronic waste.

**Outside the EU**

Please follow the regulations in your country regarding the appropriate disposal of waste electronic equipment.

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