

AHKF

Outdoor light intensity sensor



Summary

Outdoor light intensity sensor with selectable measuring range measures the intensity of outdoor sunlight or illumination. The output is an analogue signal of 0...10 V or 4..20 mA.

Application

- Advertising illumination control, public areas lighting interlock, control of sunblinds etc.
- monitoring and recording of light intensity at greenhouses, workplaces, schools, corridors, parking lots etc.

Function

The sensor contains a photodiode which measures the light intensity. The signal is amplified, calibrated and brought to the output terminals. The measuring range is selected by DIP switches situated inside the device.

The sensor is fixed by 2 or 4 screws to any flat surface. At the bottom, there is an aperture for the supply and signal cable.

Technical data

Power	AHKF-U 24 V AC ($\pm 20\%$) AHKF-I 15...36 DC ($\pm 10\%$)
Consumption	max. 1 W at 24 V DC; max. 2VA at 24 AC
Measuring ranges	0..500 lx, 0..1 klx, 0..2 klx, 0..5 klx, 0..20 klx, 0..60 klx, selectable by a DIP switch
Measuring error	less than +/- 5% of range
Output	0..10 V or 4..20 mA (active)
Ambient temperature	-30...70 °C
Protection degree	IP30, according EN 60529
Terminals	screw terminals for wires 0,14 – 1,5 mm ²
Cover	polyamide, 30% glass fibre reinforced, white similar to RAL9010

Mass	< 0,1 kg
Dimensions	see below

Sensor types

Type	Output signal	Measuring ranges
AHKF-I	4...20 mA (linearised)	0..500 lx, 0..1 klx, 0..2 klx, 0..5 klx, 0..20 klx, 0..60 klx
AHKF-U	0...10 V (linearised)	0..500 lx, 0..1 klx, 0..2 klx, 0..5 klx, 0..20 klx, 0..60 klx

Terminals

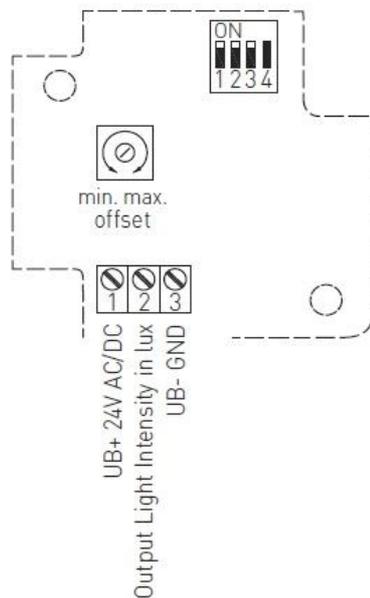
AHKF-I

 1	UB+ supply voltage 24V AC/DC
 2	Output light intensity 4...20mA (linearised)

AHKF-U

 1	UB+ supply voltage 24V AC/DC
 2	Output light intensity 0-10V (linearised)
 3	UB- GND

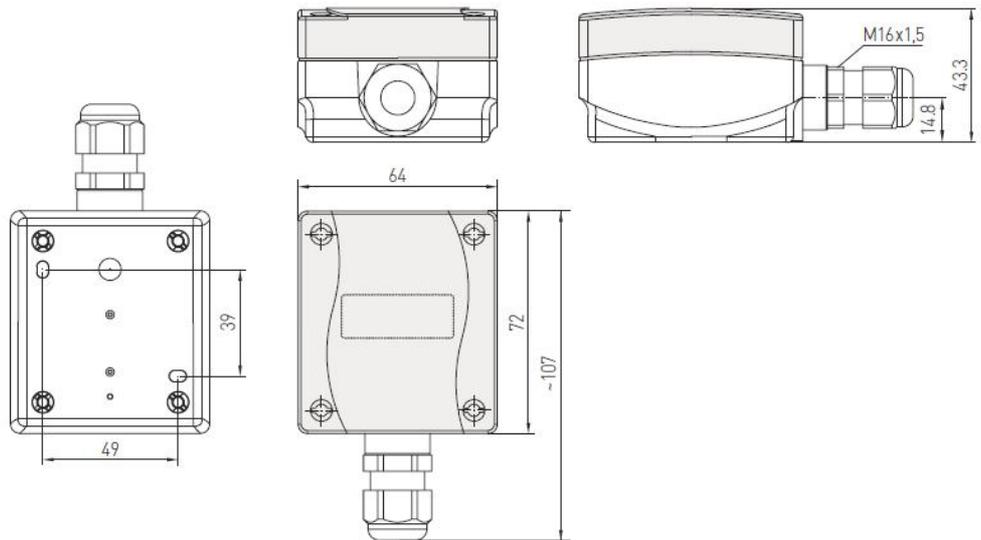
Range setting



Switchable range

Optional ranges	DIP1	DIP2	DIP3	DIP4
0...500 Lux	OFF	OFF	OFF	-
0...1 kLux	ON	OFF	OFF	-
0...2 kLux	OFF	ON	OFF	-
0...5 kLux	ON	ON	OFF	-
0...20 kLux	OFF	OFF	ON	-
0...60 kLux	ON	OFF	ON	-

Dimensions



All dimensions in *mm*.

Release notes

Version 02/2015 – Changes in power supply technical parameters, switchable ranges light intensity, measuring error, ambient temperature, protection degree, terminals and front cover.