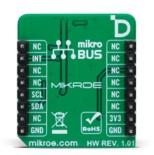


Time-saving embedded tools

MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

# Ambient 22 Click





#### PID: MIKROE-5647

**Ambient 22 Click** is a compact add-on board that measures the intensity of visible light. This board features the <u>OPT3005</u>, a single-chip lux meter from <u>Texas Instruments</u> that transforms light intensity to a digital signal output that can be directly communicated via an I2C interface. The sensor's spectral response tightly matches the human eye's photopic response along with extreme rejection to 850nm and 940nm infrared light over a wide angle of incidence. Measurements can be made from 20mlux up to 166klux without manually selecting full-scale ranges using the built-in, full-scale setting feature. This Click board<sup>™</sup> is suitable for obtaining ambient light data in applications like display optical-intensity, industrial, or commercial lighting control.

Ambient 22 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u><sup>m</sup> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u><sup>m</sup> socket.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).



MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia VAT: SR105917343 Registration No. 20490918 Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com www.mikroe.com

## Specifications

Туре	Optical
Applications	Can be used for obtaining ambient light data in applications like display optical-intensity, industrial, or commercial lighting control
On-board modules	OPT3005 - single-chip lux meter from Texas Instruments
Key Features	Low power consumption, precision optical filtering to match human eye, corresponds to a dark window because of high sensitivity, I2C interface, wide and flexible operational range, effective dynamic range with automatic gain ranging, and more
Interface	I2C
ClickID	Yes
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click boards<sup>™</sup>

<u>ClickID</u>

### Downloads

Ambient 22 click example on Libstock

Ambient 22 click 2D and 3D files

OPT3005 datasheet

Ambient 22 click schematic

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system. ISO 14001: 2015 certification of environmental management system. OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).