

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 [OPT3005](#), a single-chip lux meter from [Texas Instruments](#) 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™ 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 [mikroSDK](#) compliant library, which includes functions that simplify software development. This [Click board™](#) comes as a fully tested product, ready to be used on a system equipped with the [mikroBUS™](#) 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).

Specifications

| | |
|------------------|--|
| Type | 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

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

[ClickID](#)

Downloads

[Ambient 22 click example on Libstock](#)

[Ambient 22 click 2D and 3D files](#)

[OPT3005 datasheet](#)

[Ambient 22 click schematic](#)

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