

# Ambient 19 Click



PID: MIKROE-5245

**Ambient 19 Click** is a compact add-on board used to measure the amount of the present ambient light. This board features the APM-16D24-310-DF8/TR8, a digital output ambient light and proximity sensor with an I2C interface and interrupt from Everlight Electronics. It has a flexible and wide operating range for the ambient light sensor with a maximum resolution of 0.0023Lux/count and full detectable illumination of 57880Lux. The proximity function has an adjustable number of IR pulses from 1 to 256, and a flexible IR LED driving current to meet different application requirements. It is also equipped with an integrated filter to reduce unwanted IR signals and noise from the environment. This Click board™ is the most suitable for obtaining ambient light data in applications such as automatic residential and commercial lighting management.

Ambient 19 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 such as automatic residential and commercial lighting management
On-board modules	APM-16D24-310-DF8/TR8 - digital I2C interface sensor that integrates ambient light and proximity sensor, and Infrared LED from Everlight Electronics
Key Features	Optical response similar to human eyes, high resolution, integrated filter to reduce unwanted IR signals and environmental noise, adjustable number of pulse for the IR proximity signal, I2C interface, wide operational range, stable performance over temperature, and more
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

## Downloads

[SN74LVC1T45 datasheet](#)

[MAX8511 datasheet](#)

[PCA9306 datasheet](#)

[APM-16D24-310-DF8\\_TR8 datasheet](#)

[Ambient 19 click schematic](#)

[Ambient 19 click 2D and 3D files](#)

[Ambient 19 click example on Libstock](#)

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