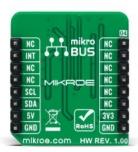


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Ambient 19 Click





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 $\underline{\mathsf{mikroSDK}}$ compliant library, which includes functions that simplify software development. This $\underline{\mathsf{Click}}$ board $\underline{\mathsf{TM}}$ comes as a fully tested product, ready to be used on a system equipped with the $\underline{\mathsf{mikroBUS}}^{\mathsf{TM}}$ 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.





health and safety management system.

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Specifications

Туре	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

<u>mikroBUS™</u>

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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