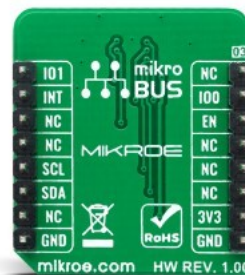
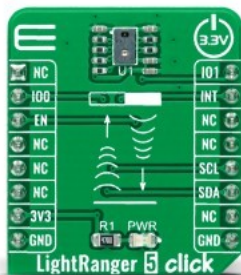


LightRanger 5 Click



PID: MIKROE-4592

LightRanger 5 Click is a compact add-on board that contains a ranging sensor with multi-target detection. This board features the TMF8801, a dToF (direct time of flight) optical distance sensor achieving up to 2500mm target detection distance from AMS-TAOS. It offers highly accurate depth accuracy detection through a sub-nanosecond light pulse and an anti-aliasing "stop-watch" method to measure the round-trip time of the pulse. It makes precise distance measurements up to a 2500mm distance range, and it is capable of operation in dark environments and the presence of sunlight. This Click board™ is suitable for presence (object) detection, distance measurement, industrial ranging, inventory control, optical switch, and many other applications.

LightRanger 5 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 presence (object) detection, distance measurement, industrial ranging, inventory control, optical switch, and many other applications.
On-board modules	TMF8801 - dToF (direct time of flight) optical distance sensor achieving up to 2500mm target detection distance from AMS-TAOS
Key Features	Direct ToF technology with high sensitivity SPAD detection, fast Time-to-Digital Converter (TDC) architecture, enables dark and sunlight environment distance measurement within $\pm 5\%$, 20mm to 2500mm distance sensing, and more.
Interface	I2C
Compatibility	mikroBUS
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

Downloads

[LightRanger 5 click 2D and 3D files](#)

[TMF8801 datasheet](#)

[LightRanger 5 click schematic](#)

[LightRanger 5 click example on Libstock](#)

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