MIKROELEKTRONIKA D.O.O, Batajnički drum 23, 11000 Belgrade, Serbia
VAT: SR105917343 Registration No. 20490918
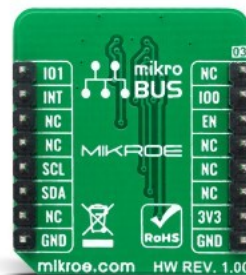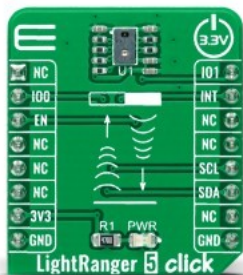Phone: + 381 11 78 57 600 Fax: + 381 11 63 09 644 E-mail: office@mikroe.com
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LightRanger 5 Click

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.

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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 ±5%, 20mm to 2500mm distance sensing, and more.
Interface	I2C
ClickID	No
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](#)