

Time-saving embedded tools

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# Microwave 4 Click





#### PID: MIKROE-5790

Microwave 4 Click is a compact add-on board that utilizes the Doppler Shift Phenomenon to sense motion. This board features the PD-V12, a miniature high-frequency microwave transceiver from Ningbo Pdlux Electronic Technology. The transmitter on this transceiver works on a 24.1GHz frequency over the flat Plane antenna. The strength of the sensor's output, in other words, the detection range, depends on the Signal-to-Noise ratio. This Click board<sup>™</sup> makes the perfect solution for the development of intrusion alarms, automatic door openers, presence-sensing applications, and more.

Microwave 4 Click is supported by a <u>mikroSDK</u> compliant library, which includes functions that simplify software development. This <u>Click board</u> comes as a fully tested product, ready to be used on a system equipped with the <u>mikroBUS</u> 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).



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## Specifications

Туре	Motion
Applications	Can be used for the development of intrusion alarms, automatic door openers, presence-sensing applications, and more
On-board modules	PD-V12 - miniature high-frequency microwave transceiver from Ningbo Pdlux Electronic Technology
Key Features	Low power consumption, low cost, high sensitivity, plain antenna, additional 12-bit analog-to-digital converter, up to 22.3ksps, uses Doppler shift phenomenon to "sense" motion, and more
Interface	Analog,I2C
ClickID	Yes
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V or 5V

### Resources

<u>mikroBUS</u>™

<u>mikroSDK</u>

Click board<sup>™</sup> Catalog

Click Boards<sup>™</sup>

### **Downloads**

Microwave 4 click example on Libstock

Microwave 4 click 2D and 3D files

PD-V12 datasheet

MCP6022 datasheet

MCP3221 datasheet

Microwave 4 click schematic

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