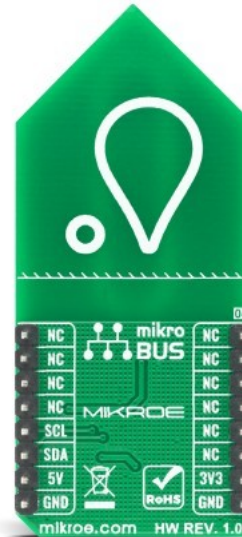
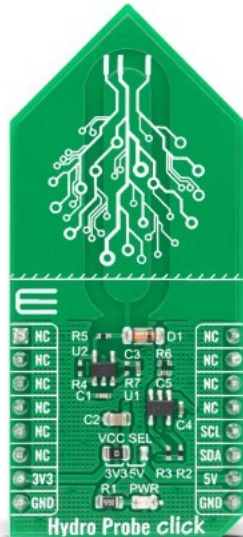


## Hydro Probe Click



PID: MIKROE-4131

**Hydro Probe Click** is a capacitive soil moisture sensor based on capacitive changes that are used to detect the volumetric water content in the soil. Water detection is achieved by using function oscillator [MIC1557](#) and ADC converter [MCP3221](#) from [Microchip](#), which allow you to convert moisture presents to the digital value. Compared to resistant soil moisture sensors, its capacitive style reduces electrode erosion making it corrosion resistant and a better choice for applications such as soil moisture detection and automatic plant watering. Besides that, Hydro Probe Click can also be used in agriculture usage, household usage for gardeners, research and forecast, and many more.

Hydro Probe 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	Environmental
Applications	Can be used in agriculture usage, household usage for gardeners, research and forecast, and many more.
On-board modules	Hydro Probe Click uses the MIC1557 and MCP3221 IC's.
Key Features	Digital reading of soil moisture.
Interface	I2C
ClickID	No
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V,5V

## Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click boards™](#)

## Downloads

[MCP3221 datasheet](#)

[Hydro Probe example on Libstock](#)

[Hydro Probe click 2D and 3D files](#)

[Hydro Probe click schematic](#)

[MIC1555-57 datasheet](#)

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).