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#### Abstract

The HARTING MICA Basic Ethernet Starter Kit is designed to give you a jump start in developing Industry 4.0 digital retrofit applications. It is ideal for those who are looking to connect periphery devices through Ethernet that may communicate over protocols such as Modbus-TCP or OPC UA. The kit contains all of the cabling required to get started and a basic version of the HARTING MICA and software. Like with all the other starter kits, this kit comes equipped with Fast-Ethernet capabilities, 8 digital GPIO ports, and the ability to be powered over PoE or 12V/24V. This document will guide you through the necessary steps of setting up your HARTING MICA.

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### **Parts Included**



# on Photo	Part Number	Description
1	2095000000300	HARTING MICA® Basic
2	20932010504	M12 X coded PushPull LAN-cable
3	21348400C79010	M12 A coded GPIO-cable
4		12V 1A Power Supply

### 1 Getting started

#### 1.1 Hardware setup

To get started with the HARTING MICA, follow the instructions below:

- 1. Connect the M12 I/O connector of the GPIO-cable to the MICA I/O socket.
- 2. Connect the Barrel Jack of the GPIO-cable to the Power Supply (connected to a wall outlet).
- 3. Connect the M12 PushPull connector of the LAN-cable to MICA PushPull socket.
- 4. Connect the RJ-45 Ethernet connector of the LAN-cable to your PC or Switch.

The I/O LED will light up red while the MICA is booting up. When the I/O LED turns green, the MICA has booted up. The PoE LED will flicker orange indicating data is being transferred.



#### 1.2 Connecting to the web interface

As soon as you have connected your MICA to your Network or PC and your MICA has fully booted up, you can now log into the device. You will need to change the static ip address of your personal computer to be within the range of the MICA. Because the MICA's ip address defaults to 10.10.10.10, the static ip of your machine should be 10.10.10.x (e.g. 10.10.10.121) with a subnet of 255.255.255.0. Next, open your browser and enter: https://device-name>.



The device name along with your login password, MAC address, and serial number (S/N) can be found on your MICA's product label.

When you first attempt to access the MICA in your web browser, you may receive a certificate/security notification. This is actually expected behavior, because there is not a registered security certificate associated with the webserver on your MICA. You can safely ignore this warning and proceed to the MICA's website. The login screen should appear where you can enter the credentials shown on the MICA's product label.



For directions on adding a certificate, consult the associated Programming Guide or contact MICAUSA@HARTING.com.

#### **Next Steps**

For whatever application you have in mind, HARTING MICA has the tools for you to build software to reach your end goal. One of the most powerful tools provided is the NodeRed container. The GPIO port on the MICA can be controlled via NodeRed, and most internet based protocols are also supported.

For ideas or support on how to continue developing your application, refer to the tutorials and examples at HARTINGMICAStarterKits.com or don't hesitate to reach out!

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Get started and register your MICA Starter Kit @ HARTINGMICAStarterKits.com