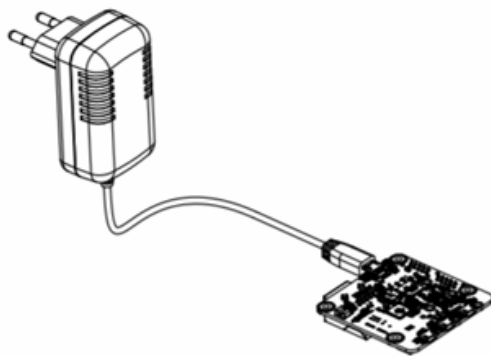# Colswe-Hub-Ethernet

To connect Colswe sensors package to a Ethernet network

Art. No. 17020

The Colswe-Hub-Ethernet is a Fast-Ethernet module that can host three Colswe modules to access them remotely. It can be powered either by a USB Micro-B cable, or directly from the Ethernet cable (PoE compatible with 802.3af standard).
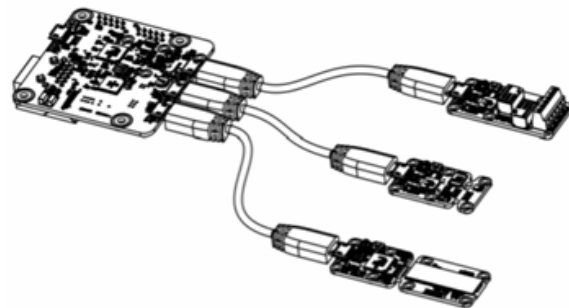
The Colswe-Hub-Ethernet can be used in the same way as a VirtualHub running on a little PC, but it is much easier to setup and maintain than a PC. It smaller and consume less. It is compatible out-of-the-box with all existing applications using Yoctopuce API. As for the VirtualHub, it can run autonomously using HTTP callbacks.

Three Colswe modules can be connected directly, one of which can be fixed directly on the Colswe-Hub-Ethernet and connected using a Board2Board-127 connector. More devices can be connected thanks to the YoctoHub-Shield extension. The Colswe-Hub-Ethernet can power Colswe environmental devices up to 2A.
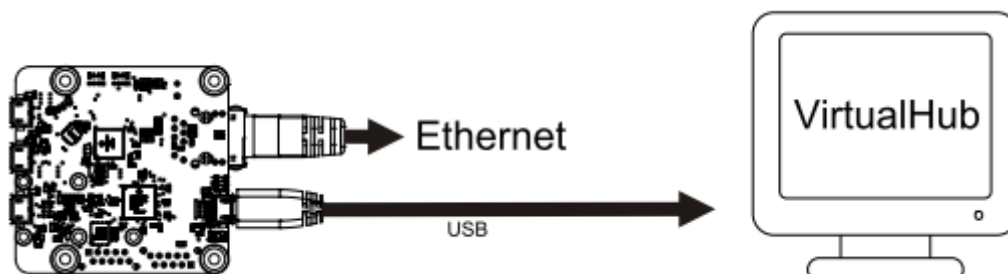
Warning: although the 3 downstream ports hosting Colswe environmental devices use USB micro-B connectors, the Colswe-Hub-Ethernet uses a specific protocol simpler than USB to talk to the devices. Therefore, it is not possible to drive or even to power a regular (non-Colswe environmental) device using the Colswe-Hub-Ethernet. It is not possible neither to use a regular USB hub, such as the Micro-USB-Hub on the downstream ports. If you need more downstream ports for Colswe environmental devices, you can use a YoctoHub-Shield.

The Colswe-Hub-Ethernet can be powered by a regular USB charger

Connecting sub-modules with USB cables

Configuration: connecting your Colswe-Hub-Ethernet by USB to a computer

Package: Sensor: Hub-Ethernet (Art. No. 27020).
Enclosure: Box-HubEth-Black (Art. No. 25040)
USB Cables:

> 3 cables from Hub to sensor units: OTG Micro-B/Micro-B-20
> length 20 cm, straight (Art. No. 26000)
> 1 cable from the power supply to the Hub; choose between:
> USB-A-MicroB-180, length 180 cm, right angle (Art. No. 36010)
> USB-A-MicroB-180, length 180 cm, left angle (Art. No. 36020)
> USB-A-MicroB-180, length 180 cm, straight (Art. No. 36030)
> 1 cable from the power supply to the Hub; choose between:

Power Supply: 3 ports USB-A 100-240 V to 5 V USB, 2,4 A, 12 W

Downloads in www.colswe.com**:**

- Colswe-Hub-Ethernet manual.pdf
- VirtualHub.Zip

Technical Specification

Module name:	Colswe-Hub-Etehrnet
Article No.:	17020
Sensor name:	YoctoHub-Ethernet (Made in Switzerland)
USB connector:	micro-B
Channels:	3 ports
Max. Current (continuous):	2 A
USB current comsumption:	130 mA
Network connection:	Fast-Ethernet
Normal operating temperature;	5...40 °C
Extended operating temperature:	-30...85 °C
Supported Operating Systems:	Windows, Linux (Intel + ARM), Mac OS X, Android
Drivers:	no driver needed
API / SDK / Libraries (USB+TCP):	C++, Objective-C, C#, VB .NET, Delphi, Python, Java/Android
API / SDK / Libraries (TCP only):	Javascript, Node.js, PHP, Java
RoHS:	yes
Enclosure:	YoctoBox-HubEth-Black (Art. No.:25040)
USB cables:	
USB OTG	USB-OTG-micro-B to micro B, 100 cm (Art. No.:28040)
USB cable left	USB-A to left angle USB micro-B, 180 cm (Art. No.:36010)
USB cable right	USB-A to right angle USB micro-B, 180 cm (Art. No.:36020)
USB cable straight	USB-A to straight USB micro-B, 200 cm (Art. No.:36030)
Power supply:	3 ports USB-A, 100-240 V to 5 V USB, 2,4 A, 12 W
Art. No.:	59010
Thickness:	38 mm
Width:	68 mm
Length:	82 mm
Weight:	104g

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