COOPER

Multisensor IoT Platform for Indoor

The platform has been designed to meet the highest quality standards for low-power sensing and wireless communication. It features 11 built-in sensors, including state-of-the-art CO_2 NDIR sensor. A full customization of the device is possible - colors, logo printing, sensor assembly, application behavior, and communication technology.
The battery life-span of the platform is up to 3 years.

Made with passion by

HARDWARIO

FEATURES

Battery operation (3x AA 1.5V)	Push button with LED backlight (optional)
Sub-GHz / IQRF low-power radio	Loudspeaker for voice output (optional)
NB-IoT communication (optional)	USB interface (with power support)
LoRa communication (optional)	Firmware updates over USB
Sigfox communication (optional)	Integrated cryptochip
Bluetooth Low Energy (optional)	Dimensions (mm) 145(l) x 88(w) x 33(h)

APPLICATIONS

- Environmental monitoring
- Smart home
- Education
- HVAC systems
- Facility management
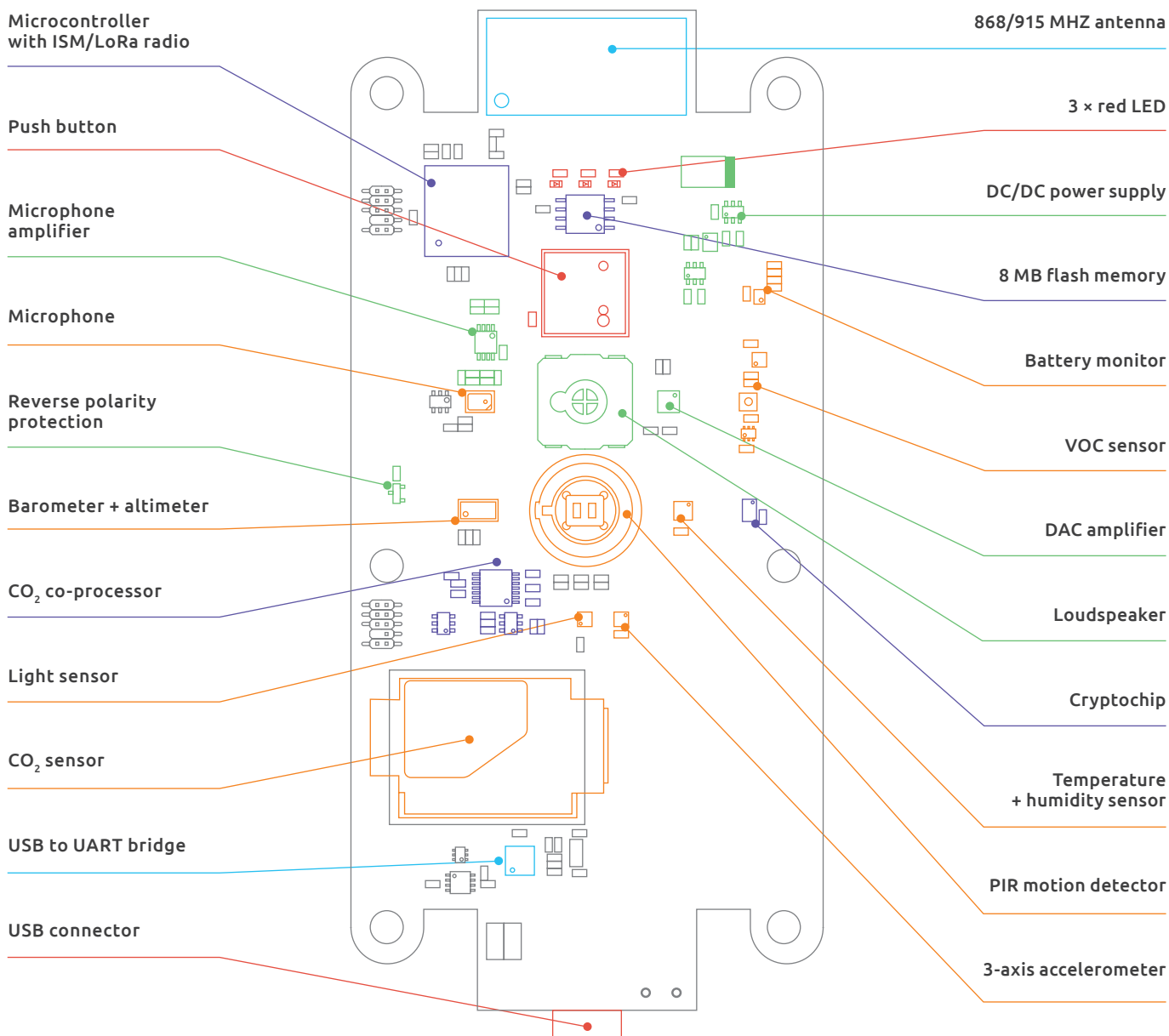- Development kit for IoT

COMMUNICATION

COOPER
Sub-GHz radio / IQRF

NB-IoT → NB-IoT Backend
Sigfox → Sigfox Backend
LoRa → LoRa Backend
Dongle → Hub
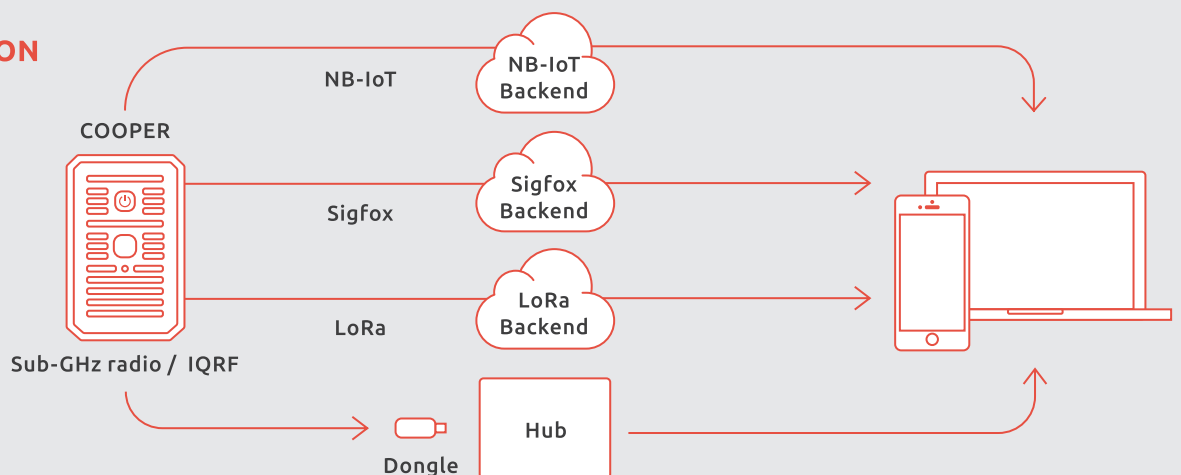
WHAT'S INSIDE

Sensors ●   Digital ●   Communication ●   Power ●   Mechanical ●

Microcontroller with ISM/LoRa radio

Push button

Microphone amplifier

Microphone

Reverse polarity protection

Barometer + altimeter

CO_2 co-processor

Light sensor

CO_2 sensor

USB to UART bridge

USB connector

868/915 MHZ antenna

3 × red LED

DC/DC power supply

8 MB flash memory

Battery monitor

VOC sensor

DAC amplifier

Loudspeaker

Cryptochip

Temperature + humidity sensor

PIR motion detector

3-axis accelerometer

Parameter	Min.	Typ.	Max.	Unit
Operating supply voltage	3.1		5.5	V
Idle current consumption		40		µA
Operating temperature range w/ CO_2 sensor	0		+50	° C
Operating temperature range w/o CO_2 sensor	-20		+70	° C
Storage temperature	-20		+70	° C
Operating relative air humidity	0		95	%
Storage relative air humidity	0		95	%

HARDWARIO   🌐 www.hardwario.com   ✉ support@hardwario.com