Innovating for a safer world

Oceasoft™

MONITORING SYSTEM

ARE YOU READY FOR THE CHANGE?

Foreword

Adapting to your daily challenges

Simplicity

Performance

Compliance and quality

Cost optimization

Foreword

❯ Remember how it was...

❯ Did you think anything could be better?

❯ Would you be willing to go back?

Ready for the change?

Cobalt X2 - New-generation monitoring system

Cobalt X2 - New-generation monitoring system

Color touch-screen

LoRaWAN™ long-range wireless communication

Wired and/or wireless sensors

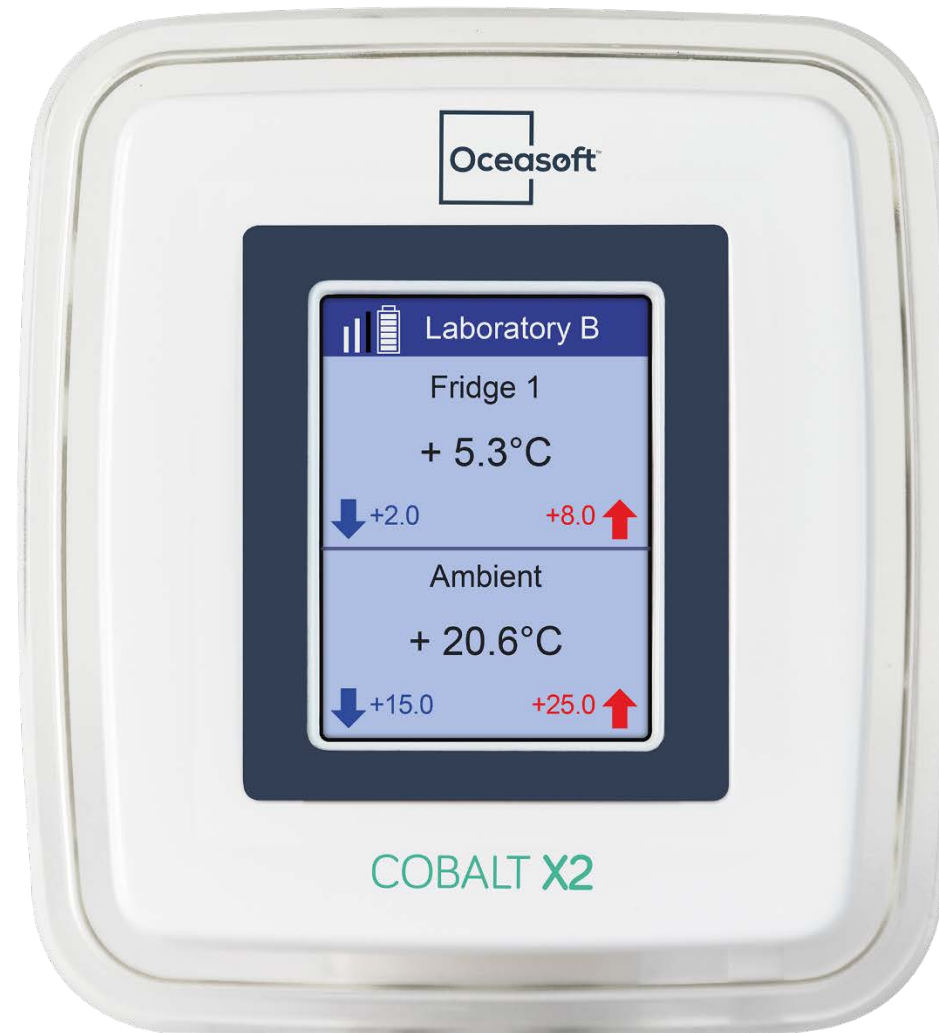**Multi-channel universal digital sensors**

Cobalt X2: main features

2.4" color touch-screen

LoRaWAN long-range wireless technology

Data collection from up to 4 Bluetooth® modules

Low power consumption and long battery life

Oceasoft

Laboratory B

Fridge 1

+ 5.3°C

+2.0   +8.0

Ambient

+ 20.6°C

+15.0   +25.0

COBALT X2

4 digital sensor channels
Smart-Sensors

Battery or USB port for AC power

Temperature, relative humidity, % CO_2, 4-20 mA, 0-5V, 0-10V, differential pressure*, dry contact

* Available soon

Solution architecture

Bluetooth® SMART

LoRaWAN™

OCEACloud

Customer server

OCEAView responsive web application

FDA 21 CFR Part 11 Compliant
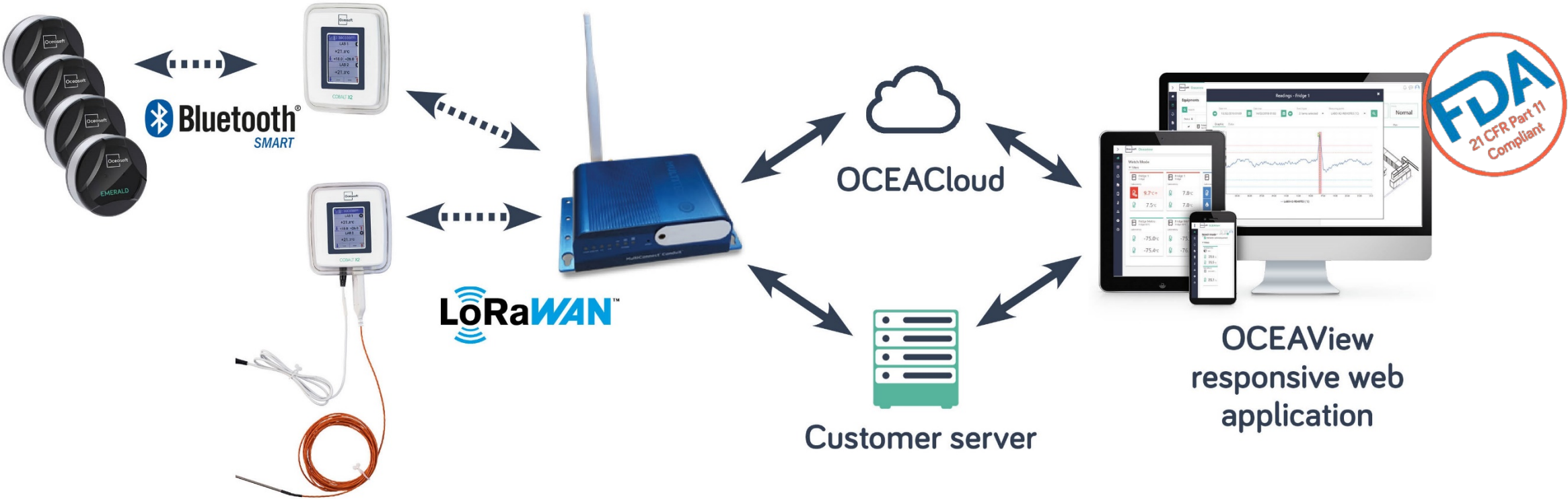
Making people's everyday work easier


- Color touch-screen

- Richer display

- Control areas

- Alarm acknowledgment directly on module

- Automatic sensor detection

- Wired and/or wireless sensors

- OCEASOFT Smart-Sensors store correction coefficients to simplify set-up and recalibration

- Cobalt X2 firmware update via Bluetooth®

PERFORMANCE: LoRaWAN™ long-range wireless communication

- Wireless range reaching 10 miles (16 km) to cover large sites
- Easy installation
- Low power consumption in modules
- Efficient communication
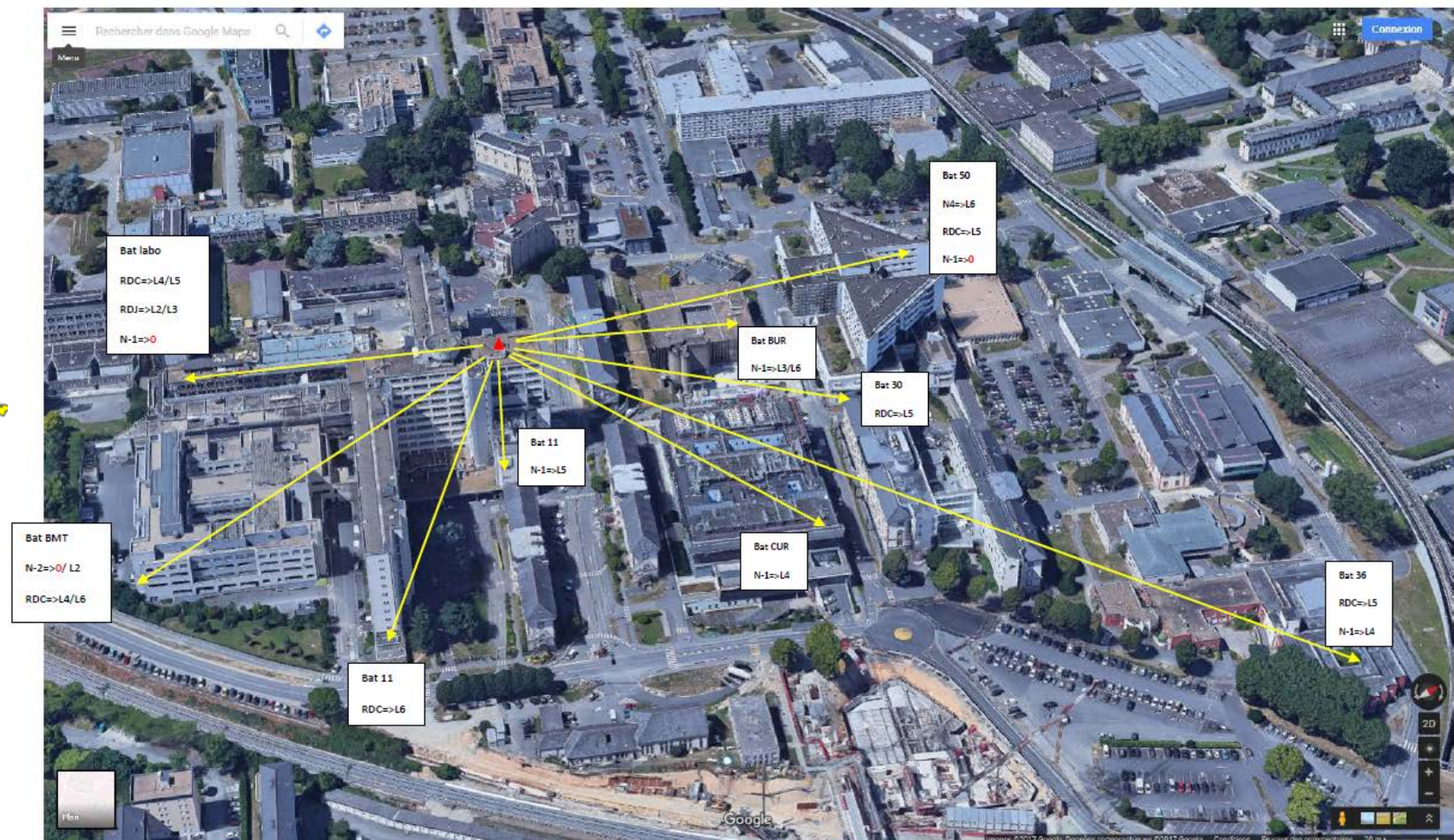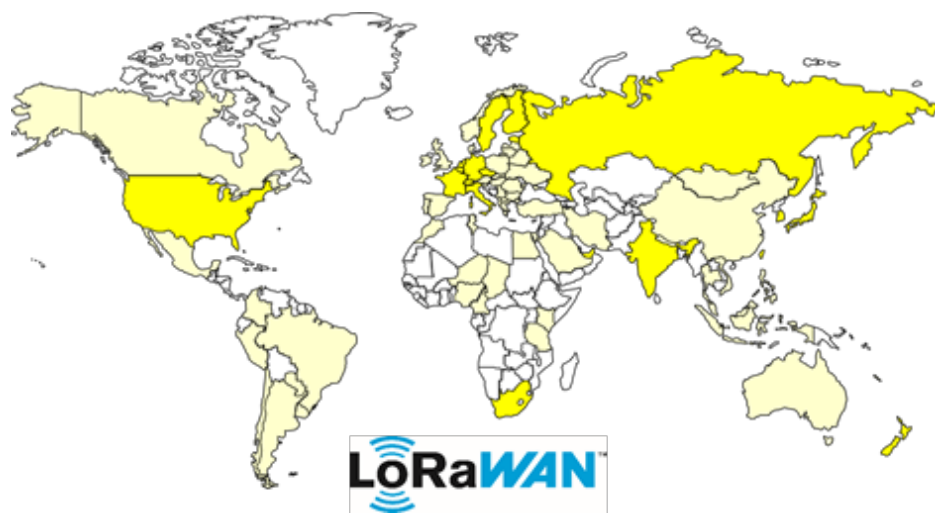
* Depending on environmental conditions and receiver antenna performance

PERFORMANCE: digital Smart-Sensors

> Multiple parameters
  - Temperature (-200 /+200°C)
  - Temperature and relative humidity
  - % CO_2
  - 0-5 V / 0-10 V / 4-20 mA
  - Dry contact
  - Differential pressure (available soon)

> Calibration coefficients stored in sensor memory to simplify recalibration process

> Data and certificates accessible easily

> No data loss or down-time for calibration

> Calibration by OCEASOFT in-house laboratory: ISO 17025 accredited (COFRAC) and NIST-traceable

PERFORMANCE: OCEAView comprehensive web application

- Supports OCEASOFT fixed and mobile data loggers

- Web application (Cloud or customer server)

- Remote data access

Application web OCEAView

PERFORMANCE: OCEAView comprehensive web application

Alarms and alerts issued in real-time

- Several configurable alarm limits (3 high + 3 low)
- Alerts by e-mail
- Alerts by SMS and voice calls (OCEAlert)

Auditable and customizable reports

- Organization, site, department, equipment group, module, and sensor
- Customizable reports, audit trail
- MKT (mean kinetic temperature) management
- MKT, TOR, pharma data
- Compliant with 21 CFR Part 11 guidelines

COMPLIANCE AND QUALITY

cofrac

ETALONNAGE

ACCREDITATION
COFRAC
N° 2-1987
PORTÉE
DISPONIBLE SUR
www.cofrac.fr

FDA
21 CFR Part 11
Compliant

❯ Compliance:
- EN 15189
- Designed according to FDA 21 CFR Part 11 guidelines
- GxP

❯ Quality:
- ISO / IEC 17025 in-house COFRAC-accredited laboratory
- Certified ISO 9001
- IQ / OQ
- Validation Pack

Cobalt X2, the complete solution for monitoring your equipment

Cobalt X2 module

Wired and wireless sensors, OCEASOFT Smart-Sensors

COFRAC-accredited ISO/IEC 17025 calibration

COBALT X2 SOLUTION

Installation, training, hotline

LoRaWAN receiver/gateway

OCEAview Web application

Data storage on Cloud, OCEACloud, or customer server

COST OPTIMIZATION

❯ Simplified installation and intuitive use

- Automatic recognition of OCEASOFT Smart-Sensors
- or fully-wireless sensors (Bluetooth®)
- Alarm acknowledgment directly on module
- Rich information and touch-screen interaction

COST OPTIMIZATION

Low up-front costs:

- Long-range communication
- Comprehensive web application
- One Cobalt X2 module can monitor up to 4 pieces of equipment

LoRaWAN™

FDA
21 CFR Part 11
Compliant

Application web OCEAView

COST OPTIMIZATION

❭ **Low operating and maintenance costs**

- Simplified set-up and recalibration
- Low power consumption
- Battery or AC power (USB)
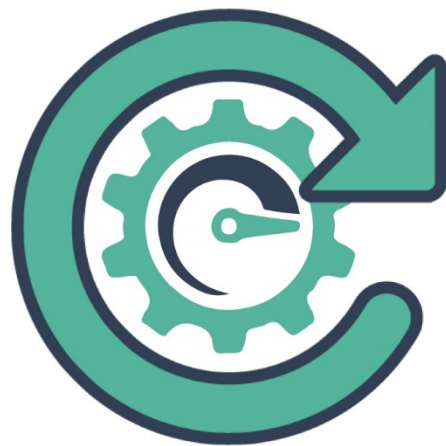
OCEAView

Universal web application: views and features

OCEAVIEW | Watch Mode

OCEAVIEW | Managing layouts

OCEAVIEW | Managing equipment

OCEAVIEW | Reading graphs

OCEAVIEW | Managing alarms

OCEAVIEW | Managing alarms

Examples of installation combinations

EXAMPLES OF INSTALLATION COMBINATIONS
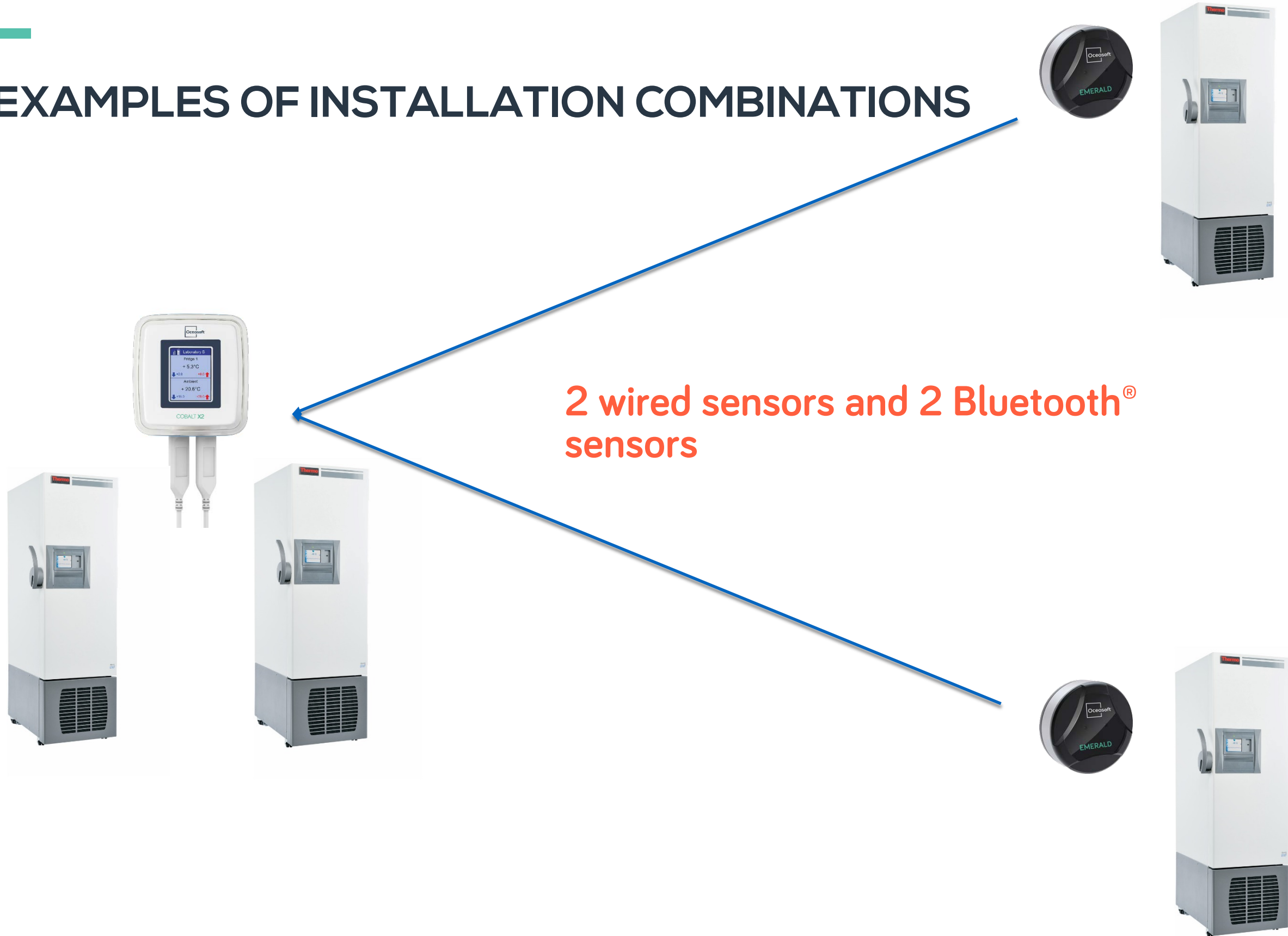
2 wired sensors and 2 Bluetooth® sensors

EXAMPLES OF INSTALLATION COMBINATIONS

1 wired sensor and 3 Bluetooth® sensors

COST OPTIMIZATION

124 €

299 €

Multiple combinations

124 €

124 €

124 €
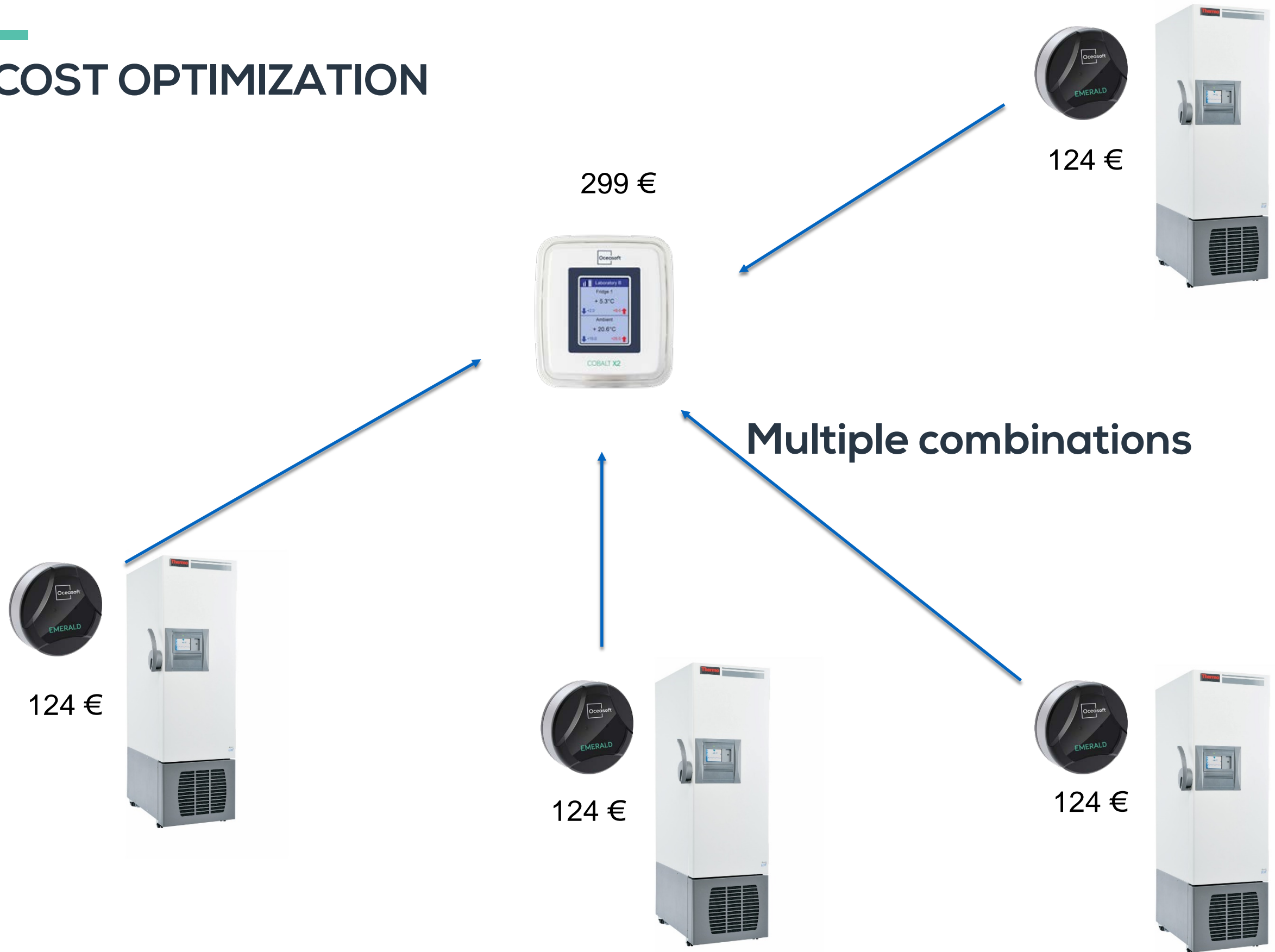
Total: 795 €, that is: 198.50 € / equipment

OTHER CONFIGURATIONS

- DS18B20 digital temperature probe
  - -40 to +80°C
  - -40 to +120°C

- PT100 Smart-Sensor
  - -200 to 0°C
  - -100 to +100°C
  - 0 to +200°C

- Temp/Humidity Smart-Sensor
  - -40 to +100°C
  - 0 to 99% RH

- Smart-Sensor
  - 4-20 mA
  - 0-5V
  - 0-10V

- Bluetooth Emerald Sensor
  - -40 to +85°C
  - -200 to 0°C (Pt100 analog)
  - 0 to +200°C (Pt100 analog)

COMBINATIONS OF WIRED + WIRELESS SENSORS

If sensor 1 is of this type:		Sensor 2, 3, or 4 **can be:** 0 ou <u>1</u> **0 or 1** of your choice in green (wired sensors) and <u>X</u> sensors in blue (wireless)						
Digital temperature (-40°C to +120°C)		Digital temperature (-40°C to +120°C)	Temperature/Humidity Smart-Sensor	PT100 Smart-Sensor (-200°C to +200°C)	Smart-Sensor 4-20 mA / 0-5V / 0-10V	Emerald x **3** if <u>no</u> other wired sensors	Emerald x **2** if other wired sensor is <u>not dual</u> (humidity)	Emerald x **1** if other wired sensor <u>is dual</u> (humidity)
Temperature/humidity Smart-Sensor		Digital temperature (-40°C to +120°C)	Temperature/Humidity Smart-Sensor	PT100 Smart-Sensor (-200°C to +200°C)	Smart-Sensor 4-20 mA / 0-5V / 0-10V	Emerald x **2** if <u>no</u> other wired sensors	Emerald x **1** if other wired sensor is <u>not dual</u> (humid.)	-
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Triple CO2, temp, humidity sensor		Digital temperature (-40°C to +120°C)	PT100 Smart-Sensor (-200°C to +200°C)	Smart-Sensor 4-20 mA / 0-5V / 0-10V	-	Emerald x **1**	-	-

Cobalt X2

Monitoring of tomorrow, today

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