

# Cobalt X™

## Universal data logger

### Full-featured touchscreen data logger integrating LoRaWAN® and Bluetooth® connectivity, with support for up to four simultaneous wired and/or wireless sensors

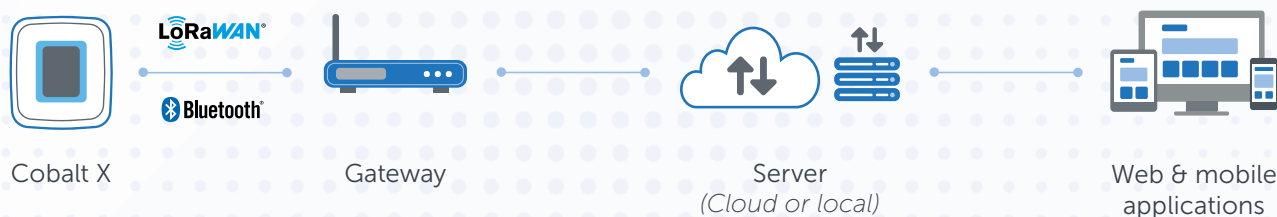
Cobalt X data loggers support up to four external sensors simultaneously to monitor your invaluable equipment. Readings are recorded in on-board memory, then transmitted to the OCEAView™ remote monitoring solution via LoRaWAN or Bluetooth Low Energy connectivity. Cobalt X offers interactive touch screen controls and highly visible alert indicators, with support for a wide variety of environmental sensors, including our Bluetooth-enabled remote sensors.

- Smart-Sensors™ and numerous wired and wireless sensors for monitoring temperature, humidity, CO<sub>2</sub>, differential pressure, 4-20 mA, 0-5 or 0-10 V, dry contact, and light
- Ideal for the life sciences sector, including labs, hospitals, storage facilities, and manufacturing
- Interactive touch-screen for fast access to setup, information, and alarm acknowledgement
- Fully integrated with the OCEAView Cloud or on-premises monitoring solution using LoRaWAN or Bluetooth wireless connectivity



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## Information flow



# Specifications

Applications	Refrigerators • Freezers • ULT freezers • Nitrogen tanks • Water baths • Ovens • CO <sub>2</sub> incubators • Autoclaves • Cold rooms • Cleanrooms • Warehouses
Physical parameters	Temperature • Humidity • CO <sub>2</sub> • Differential pressure • 4-20 mA • 0-5 V, 0-10 V • Dry contact input • Light
Supported sensors	Digital temperature sensors: -40°C to +120°C (-40°F to +248°F) Pt100 Smart-Sensors: -200°C to +200°C (-328°F to +392°F) Temperature and humidity Smart-Sensor: -40°C to +100°C (-40°F to 212°F), 0% to 99.9% RH Temperature, humidity, and CO <sub>2</sub> Smart-Sensor: -40°C to +100°C (-40°F to 212°F), 0% to 99.9% RH, 0% to 9.99% CO <sub>2</sub> Differential pressure Smart-Sensors: -500 Pa to +500 Pa Universal Smart-Sensor: 4-20 mA, 0-5 V or 0-10 V Dry contact cable: open or closed Emerald: -40°C to +85°C (-40°F to 185°F); Emerald + external Pt100 sensors: -200°C to +200°C (-328°F to +392°F) Atlas: -30 °C to + 70 °C (-22 °F to +158 °F), 0 to 90% RH, 0 to 32,764 Lx
Calibration options	ISO/IEC 17025 (COFRAC) accredited • Certified (non-accredited) • NIST-traceable • Recalibration via sensor exchange
Measurement points	Cobalt X1: up to 2 measurement points • Includes 1 x 1.5 m (4 ft) flat cable Cobalt X2: up to 4 measurement points • Includes 2 x 1.5 m (4 ft) flat cables
Display & interface	2.4" (6.1 cm) glove-compatible, color touch-screen for setup, synchronization with server, latest readings, alarm status, alarm acknowledgment with PIN code • Temperature in °C or °F
Alarms	Alarms indicated by flashing lights and buzzer (sound only when on AC power), and transmitted to OCEAView platform for fast user notification • 3 high & 3 low alarm limits (with programmable delay for each alarm limit)
Software	Full integration with OCEAView monitoring platform (Cloud or on-premises) • Data logging setup handled via OCEAView • Sensor reading interval adjustable for each measurement point
Connectivity	LoRaWAN long-range wireless technology, range up to about 15 km/10 miles L.O.S. <sup>(1)</sup> • LoRaWAN regional channel plans in ISM radio spectrum: EU868, US915, AS923-1, AS923-2, AS923-3, AS923-4, AU915, IN865, KR920 • Bluetooth Low Energy • Omnidirectional antenna
Data management	4,000 readings per measurement point (about 4 weeks of data with reading interval of 10 minutes) • Unlimited storage of uploaded data in OCEAView
Power	2 x Li-SOCI2 (LS17500) 3.6 V user-replaceable lithium batteries <sup>(2)</sup> • At least 1 year battery life (standard usage) • 5V power adapter (optional)
Operating conditions	Standard data logger: 0 °C to +50 °C (+32 °F to +122 °F); 0 to 90% RH (non-condensing) • With optional IP67 casing: -10 °C to +50 °C (+14 °F to +122 °F); 0 to 99.9% RH (non-condensing)
Storage conditions	-10 °C to +60 °C (+14 °F to +140 °F) • 0 to 90% RH (non-condensing) • Optimal storage around 25 °C (77 °F)
Casing & dimensions	ABS / ABC-PC casing • 100.8 x 110.8 x 29.6 mm (4.0 x 4.4 x 1.2 in.) • Weight with batteries: 180 g (6.4 oz.)
Protection index	IP30 standard • Optional IP67 external case for protection against shocks, vibrations, cleaning operations
Mounting & installation	Wall-mount kit for use with screws, magnet, or Velcro® • Optional locking with padlock
Certifications	CE, FCC, IC, ACMA, ICASA

<sup>(1)</sup> Line-of-Sight range based on environmental conditions. Requires LoRaWAN coverage.  
<sup>(2)</sup> Contact us if you need to order without batteries.



## Product references

PART NUMBER <sup>(2)</sup>	DESCRIPTION	SENSORS
Cobalt X1 / X2 data logger (sensors not included)		
ENR.CX1.P001 • ENR.CX1.R001	Cobalt X1 - Multi MHz	up to 2
ENR.CX1.9001 (915 MHz)	Cobalt X1 - North America	
ENR.CX1.8001 (868 MHz)	Cobalt X1 - Europe	
ENR.CX2.P001 • ENR.CX2.R001	Cobalt X2 - Multi MHz	up to 4
ENR.CX2.9001 (915 MHz)	Cobalt X2 - North America	
ENR.CX2.8001 (868 MHz)	Cobalt X2 - Europe	
Accessory		
ACH.ALM.0008	Universal power adapter for Cobalt X data logger • 5V/110-240V • 3 m (10 ft) USB cable	n/a



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