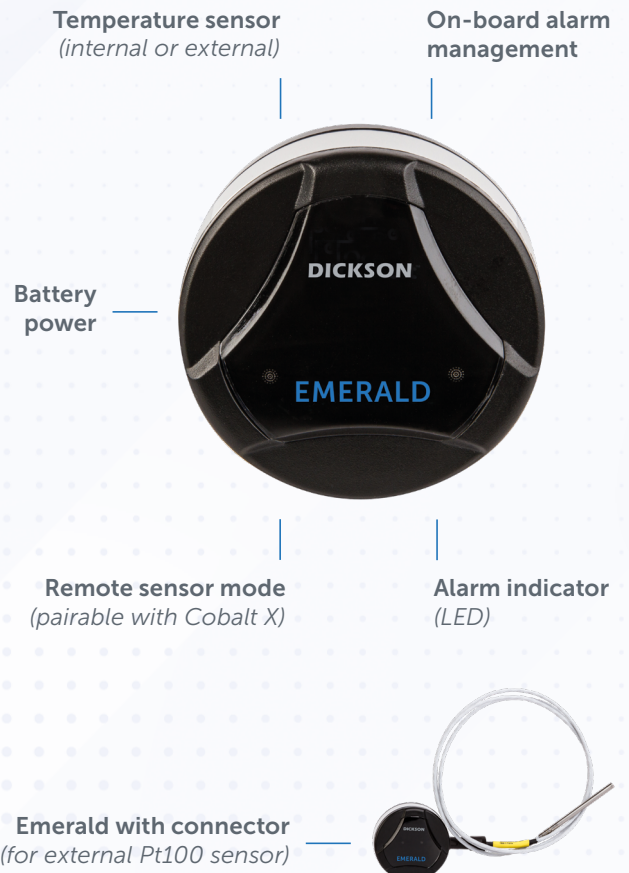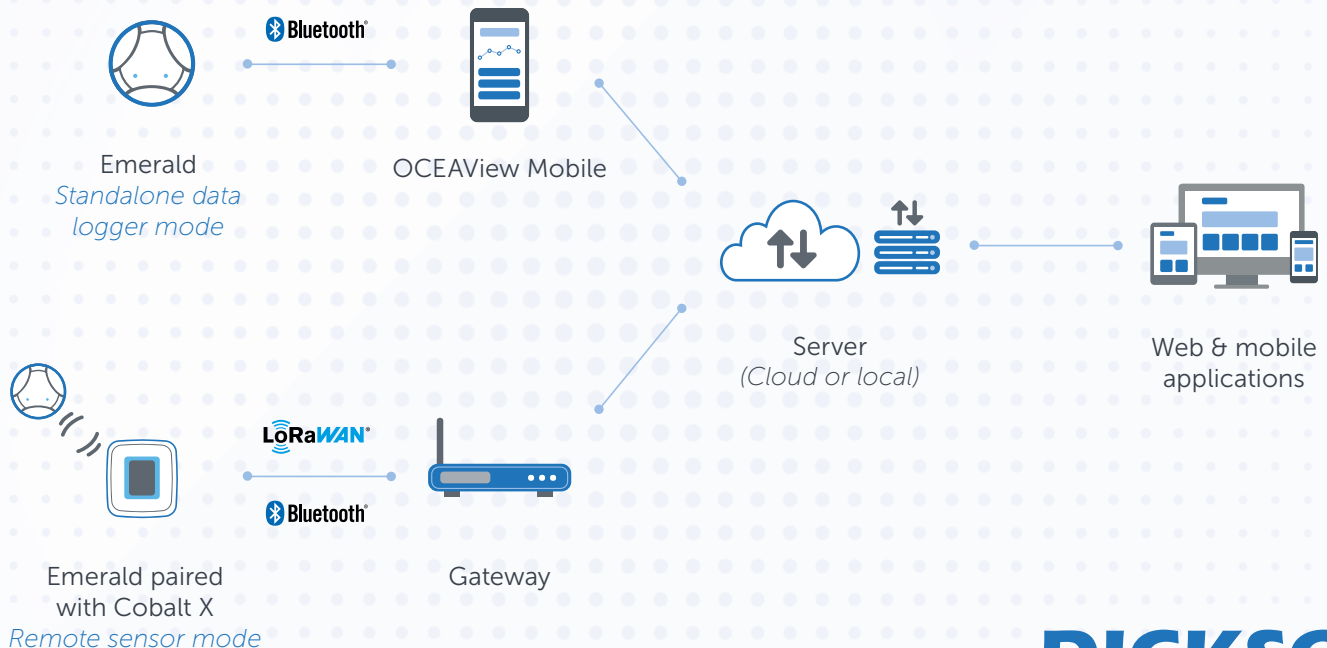# Emerald™
Small and robust for transport

Bluetooth®-enabled wireless temperature sensor for Cobalt X™ data loggers or multi-destination data logger for mobile monitoring

Emerald can be used as mobile data logger or as a wireless sensor paired with a Cobalt X data logger. For monitoring on the move, you can collect data at any time with the OCEAView™ Mobile app and synchronize it with the OCEAView web platform. As a wireless sensor for Cobalt X, Emerald enables cable-free placement in hard-to-reach areas.

- For use as a mobile data logger or external wireless sensor for Cobalt X

- Shock-resistance ideal for cold chain tracking on the go

- Data access via OCEAView web and mobile applications

Temperature sensor *(internal or external)*

On-board alarm management

Battery power

Remote sensor mode *(pairable with Cobalt X)*

Alarm indicator *(LED)*

Emerald with connector *(for external Pt100 sensor)*

Information flow

Emerald
Standalone data logger mode

Bluetooth®

OCEAView Mobile

Server
(Cloud or local)

Web & mobile applications

Emerald paired with Cobalt X
Remote sensor mode

LoRaWAN®

Bluetooth®

Gateway

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Environmental Monitoring + Compliance Experts

Specifications

Applications	Cold-chain and transport monitoring • As Cobalt X wireless sensor for hard-to-reach locations
Physical parameters	Temperature
Supported sensors	Internal temperature sensor: -40 °C to + 85 °C (-40 °F to +185 °F) *Resolution: 0.0625 °C • Expanded uncertainty after calibration: ± 0.3 °C to 0.5 °C* Pt100 sensors: -200 °C to + 200 °C (-328°F to +392°F)
Calibration options	ISO/IEC 17025 (COFRAC) accredited • Certified (non-accredited) • NIST-traceable
Measurement points	1 measurement point
Display & interface	No physical display • Magnet controllable Bluetooth activation for pairing, data logging start
Alarms	1 high and 1 low alarm limit (with programmable delay) • Visual alarm/status indicator • Alert notification via OCEAView
Software	Data logging configuration and integration with OCEAView platform (Cloud or on-premises) via OCEAView Mobile • Adjustable sensor reading interval
Connectivity	Bluetooth Low Energy (integrated antenna)
Data management	16,000 readings (about 4 months of data with reading interval of 10 minutes) • Unlimited storage of uploaded data in OCEAView
Power	Li-SOCl2 (LS14250) 3.6 V user-replaceable Lithium battery • Over 1 year battery life (standard usage)
Operating conditions	-40 °C to +85 °C (-40 °F to +185 °F) • 0 to 90% RH (non-condensing)
Storage conditions	-40 °C to +85 °C (-40 °F to +185 °F) • 0 to 90% RH (non-condensing) • Optimal storage around 25 °C (77 °F)
Casing & dimensions	ABS / ABC-PC / aluminum • Ø50 x 20 mm (Ø1.9 x 0.8 in.) • Weight w/battery: 48 g (1.7 oz.)
Protection index	IP44 (IP40 with external sensor)
Mounting & installation	Mounting kit for use with screws or magnet
Certifications	CE, FCC, IC • EN 12830 certified

Bluetooth®

Product references

PART NUMBER	DESCRIPTION
Emerald data logger with internal sensor	
ENR.EMD.P005	Data logger with internal temperature sensor
Emerald data logger for external Pt100 sensor *(not included)*	
ENR.EMD.P006	Data logger with connector for external Pt100 sensor
Accessory	
ACC.EMD.0012	Set of 4 x LS14250 batteries

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