

TECHNICAL SPECIFICATIONS

IoT X Connect

Model No. CL 830-SC

Always-On Monitoring for Critical Shipments

IoT X Connect delivers enhanced monitoring for highly sensitive pharma products, combining precision sensors, real-time alerts, and advanced connectivity. It also acts as a gateway, collecting data from nearby IoT X loggers, reducing the need for multiple cellular loggers in multi-package shipments.

Key Features

Comprehensive Monitoring

Real-time tracking of temperature, humidity, light, motion, acceleration/shock, tilt, and location ensures end-to-end visibility and risk mitigation.

· Advanced Positioning

Multi-Modal positioning technology based on GNSS (GPS, BeiDou, GLONASS, A-GPS), Wi-Fi Positioning and Ocean Tracking.

· Real-Time Alerts

Instant notifications/alerts via email or SkyMind for quick response.

Data Accessibility

Full data availability through SkyMind or API integration.

· Cost-Effective Scalability

One IoT X Connect collecting data from multiple IoT X replaces multiple cellular trackers, cutting hardware costs while enabling seamless monitoring for any shipment size. Reusable and rechargebale real-time monitoring logger.

· Flexible, Multi-Modal Monitoring

IoT X loggers provide periodic location updates via LoRa, ensuring visibility across truck, air, and sea freight. For continuous, end-to-end tracking anytime, anywhere, IoT X Connect enables real-time monitoring.

Full Visibility

Ensures shipment-wide monitoring at the product level, allowing proactive interventions and streamlined product release.













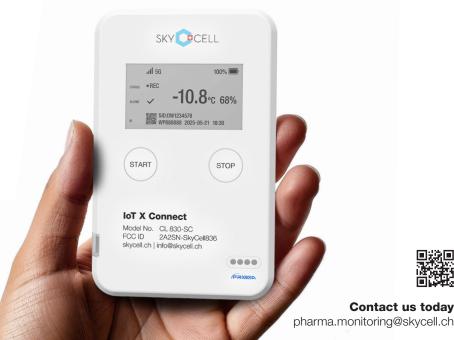






The Hybrid Advantage

SkyCell's hybrid solution eliminates the need for costly cellular trackers on every pallet. A single IoT X Connect can connect to and monitor multiple IoT X loggers across an entire shipment, ensuring continuous visibility while significantly reducing costs.





Internal Temperature Sensor

Sensor Type	Internal NIST-traceable temperature sensor
Measurement Range	-30°C to +70°C (-22°F to +158°F)
Accuracy	±0.5°C (-20°C to +40°C); ±1°C otherwise
Resolution	0.1°C

Internal Humidity Sensor

Measurement Range	5%~95% RH
Accuracy	±3% (20%~80% RH); ±5% otherwise
Resolution	1% RH

Mechanical Specification

Weight	170g
Dimensions	107 x 68.7 x 19.8 mm
Environmental Rating	IP65
Memory Capacity	28,800 readings
Charge Port	USB Type-C
Battery Type	Rechargable, non-lithium battery
Display	E-ink display with high resolution and always-on mode

Operating Specification

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Monitored Parameters	 Temperature Humidity Light (0~52,000 Lux; detects door or carton openings) Shock (8-level detection and analysis) Tilt (3-axis detection, resolution of 0.1°) Acceleration (3-axis, range of 0-16G) Motion (shipment motion/rest state detection) Location
Data Logging Interval	10 minutes (configurable to fit the specific use case)
Data Reporting Interval	60 minutes (configurable to fit the specific use case)
Operating Temperature	-30°C to +70°C
Storage Temperature	-10°C to +55°C

Wireless Communication

Connectivity	 Global LTE 4G/5G with fallback to 2G network Supports Bluetooth sensors and probe sensors
Location Type	 Satellite (GPS, GLONASS, BeiDou) A-GPS LBS Wi-Fi Position
Location Accuracy	 Satellite/GPS: ±10 m Wi-Fi Geolocation: ±100 m Cellular Triangulation: ±500 m
SIM Card	Internal embedded with global data roaming

Approval

Certifications	FCC, CE, RTCA/DO-160G, UN38.3, RoHS, WEEE, EN12830, IATA PI967 Approval on most major Airlines
Calibration Certificates	Multi-temperature point calibration issued for each device

