SKY✛CELL

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 global cellular 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.

Contact us today
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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

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**