

# 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 Validade for quick response.

- **Data Accessibility**

Full data availability through Validade 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 rechargeable 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	<b>Internal NIST-traceable temperature sensor</b>
Measurement Range	<b>-30°C to +70°C (-22°F to +158°F)</b>
Accuracy	<b>±0.5°C (-20°C to +40°C); ±1°C otherwise</b>
Resolution	<b>0.1°C</b>

### Internal Humidity Sensor

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

### Mechanical Specification

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

### Operating Specification

Monitored Parameters	<ul style="list-style-type: none"> <li>• <b>Temperature</b></li> <li>• <b>Humidity</b></li> <li>• <b>Light (0~52,000 Lux; detects door or carton openings)</b></li> <li>• <b>Shock (8-level detection and analysis)</b></li> <li>• <b>Tilt (3-axis detection, resolution of 0.1°)</b></li> <li>• <b>Acceleration (3-axis, range of 0-16G)</b></li> <li>• <b>Motion (shipment motion/rest state detection)</b></li> <li>• <b>Location</b></li> </ul>
Data Logging Interval	<b>10 minutes (configurable to fit the specific use case)</b>
Data Reporting Interval	<b>60 minutes (configurable to fit the specific use case)</b>
Operating Temperature	<b>-30°C to +70°C</b>
Storage Temperature	<b>-10°C to +55°C</b>

### Wireless Communication

Connectivity	<ul style="list-style-type: none"> <li>• <b>Global LTE 4G/5G with fallback to 2G network</b></li> <li>• <b>Supports Bluetooth sensors and probe sensors</b></li> </ul>
Location Type	<ul style="list-style-type: none"> <li>• <b>Satellite (GPS, GLONASS, BeiDou)</b></li> <li>• <b>A-GPS</b></li> <li>• <b>LBS</b></li> <li>• <b>Wi-Fi Position</b></li> </ul>
Location Accuracy	<ul style="list-style-type: none"> <li>• <b>Satellite/GPS: ±10 m</b></li> <li>• <b>Wi-Fi Geolocation: ±100 m</b></li> <li>• <b>Cellular Triangulation: ±500 m</b></li> </ul>
SIM Card	<b>Internal embedded with global data roaming</b>

### Approval

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

