

TECHNICAL SPECIFICATIONS

IoT ULD Cube

Model No. MR 815

Smart ULD Tracking

IoT ULD Cube is a low-maintenance and durable wireless data logger designed for ULD containers. With real-time tracking, minimal infrastructure requirements, and seamless global operability, it ensures continuous visibility across your fleet for years.

Key Features

Asset Tracking

Milestone-based asset tracking ensures efficient management of the ULD fleet. The loggers are easy to install and offer an impressive runtime of up to 4 years.

Global Operability: Live Lo

Utilizes the ISM 2.4GHz band for seamless operation worldwide without state-specific licensing requirements.

• Optimized ULD fleet management Integrate seamlessly with SkyMind

software, leveraging advanced tracking technology.

Live Location Tracking:

Real-time tracking via LoRa or BLE connectivity, enabling enhanced visibility and accurate decision-making.



Temperature Sensor

Measurement Range	-40°C to +75°C
Accuracy	$\pm 0.2^{\circ}$ C > 0°C, $\pm 0.3^{\circ}$ C < 0°C

Mechanical Specification

Weight	20g	
Dimensions	57 x 35 x 20 mm	

Operating Specification

Mount	Holder is required to mount in to the container
Operating Temperature Range	-40°C to +75°C
User Interface	1x RGB LED 1x Push button
Battery Life	4 years (default configuration)

Wireless Communication

Transmission Interval	1h moving, 6h stationary (accelerometer-based detection of movement)
Connectivity	Fully automated readout via SkyCell gateway network or via IoT X Connect
Wireless Communication Standards	LoRa, BLE
Frequency Band	2.4 GHz global ISM band 2.4 to 2.48 GHz
RF Transmission Power	Max. 12.5 dBm / 17.8 mW TX power





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Approval

Airline Approval	Approved by major airlines as cargo tracking device complies with EASA, AMC1 CAT.GEN.MPA.140, 2019
Conformity	CE, FCC
EU Directives	2014/30/EU Electromagnetic Compatibility (EMC) 2014/53/EU Radio Equipment Directive (RED) 2014/45/EU Low Voltage Directive (LVD) 2015/863/EU on the Restriction of Hazardous Substance (RoHS3)
FCC ID	2A2SN-SKYCELL810
Standards	EN 301 489-1 V2.2.3 (EMC) EN 301 489-17 V3.2.4 (EMC) EN 300 328 V2.2.2 (Radio) EN 62368-1:2014+A11:2017 (Electrical Safety) EN 50663:2017 (RF Exposure) EN 63000:2018 (RoHS) FCC Part 15 C: 15.203 (Radio) FCC Part 15 C: 15.205 (Radio) FCC Part 15 C: 15.207 (EMC) FCC Part 15 C: 15.209 (EMC) FCC Part 2: 15 C: 15.209 (EMC) FCC Part 3: 15 C: 15.247 (Radio) 47 CFR Part 2.1091 (RF Exposure) RTCA DO-160, Section 21, Category H (RF radiated emissions) UN38.3 (Battery) UL 1642 (Battery)



Connect IoT ULD Cube with various assets and loggers for unified tracking and smarter supply chain management.

