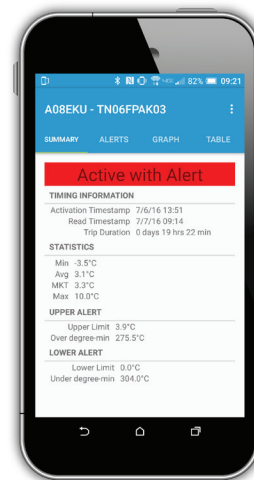# UltraNFC

Temperature Monitoring Labels

PakSense™ UltraNFC Labels monitor time and temperature of perishable products during distribution and storage. Labels are flat and transfer time/ temperature data via short-range near field communications (NFC) using NFC-enabled Android phones and tablets. Label data is immediately available on the screen of the Android device via the PakSense Label Viewer mobile application. UltraNFC Labels leverage the capabilities of Android phones that are already widely available and eliminate the need for proprietary readers. Data is easily sent to any email address via the mobile application.

UltraNFC Labels use an innovative temperature sensor that enables them to take a surface read of the object to which they are attached. This provides a closer approximation of actual product temperature versus the general ambient readings provided by bulkier recorders. Labels sample temperature every minute for highly accurate temperature reads and are encased in waterproof packaging. Further, each label is NIST traceable. Because of the unique physical characteristics of the sensor, labels do not require on going calibration to maintain accuracy. All labels are manufactured in ISO-9001 registered facilities.

Cold Chain Simplicity

- *Quick data downloads*
- *Leverages Android mobile devices*
- *Quickly send data to any email address*
- *Accurate temperature measurements*

Data Summary

Graph of Data

Technical Specifications

Dimensions and Weight
    2.4 x 3.4 inches (61 x 81 millimeters)
    0.5 ounces (14.2 grams)

Memory: 2,000 data points

NFC Read Range: Up to 2" (5.08 cm)

Use Life & Shelf Life: Up to 15 months

Calibration: All temperature sensors calibrated during manufacturing process, ongoing calibration is not required

Temperature Sampling Frequency: One minute

Recommended Operating Range: -25°C to 60°C (-13°F to 140°F)

Typical Temperature Accuracy: -25°C to 60°C (-13°F to 140°F): ±0.5°C (0.9°F)

Temperature Resolution: 0.1°C

Label Pouch/Housing: NEMA 6P/IP68 dust and water resistant; waterproof, food-safe label pouch

Start Up Delay: Standard 30 minutes or configurable 0 minutes to 1275 minutes

Alarm Display Data: LEDs signify temperature excursion

Available Alarm Configurations: Consecutive standard or cumulative via custom order

Recycle Options: Available through PakSense GreenSense™ program

Reading Redundancy: UltraNFC Labels can also be read using the PakSense Ultra Contact Reader

Certifications: CE, RoHS, Chinese RoHS, C-Tick; Lithium battery exemption on file

NIST Traceability: Certificate of NIST Traceability available upon request

Temperature Units: °F or °C, user programmable via mobile app

Supported NFC Readers: Any Android 4.1 and newer with integrated NFC reader.

PakSense Label Viewer App: Download at www.paksense.com or scan UltraNFC Label QR code for access to the download site or search for PakSense in the Google Play store.

PAKSENSE™