



## Thinfilm NFC OpenSense™ for Rx and OTC



# Differentiate your pharmaceutical and over-the-counter products with intelligent packaging that promotes innovative mobile engagement

### **Connecting the world of physical packaging to dynamic online content to engage and educate customers while maintaining brand integrity.**

Healthcare providers and consumers are increasingly relying on mobile devices and online content to help choose the best-suited over-the-counter (OTC) products or to learn more about prescribed medications.

Pharmaceutical (Rx) and OTC brands can now differentiate their products with packaging that uses Thinfilm's NFC OpenSense technology to create mobile connectivity and consumer engagement.

When integrated into folding cartons or pressure sensitive labels manufactured by Jones, NFC OpenSense delivers personalized content directly to consumers—all with the tap of a mobile phone to an NFC OpenSense tag.

Unique IDs within each tag provide item level traceability to a package, bottle, tube or container.

Tag sensors are able to distinguish between the "factory sealed" or "open" states of a package or container and deliver dynamic, relevant information based on the tag status.

Above and beyond consumers' initial interaction with packaging, NFC OpenSense takes the relationship between Rx and OTC brands and consumers to a whole new level in a way that is both secure and convenient.

At the point of sale, a simple tap of an NFC-enabled smartphone verifies that the packaging has been and remains "factory sealed"—allowing consumers to buy with confidence. Tapping the tag can also provide consumers access to key product information before purchasing, such as potential contraindications, side effects, and important drug interactions.

Once a consumer opens the packaging, brand owners can build loyalty post-sale by engaging in direct-to-consumer communication. Each of these interactions affords an important opportunity to capture intelligence and gain valuable insight into buyers' behaviour.

The Jones/Thinfilm intelligent packaging solution can also serve as a delivery mechanism to notify consumers about upcoming expiration dates and reorder reminders or to post critical recall notifications. Brands may even opt to extend the dialogue by establishing medication intake logs and creating a means to report side effects.

**Bring your packaging to life — contact us today to learn more about Thinfilm NFC OpenSense.**



## Thinfilm NFC OpenSense™ for Rx and OTC

### Applications

- Confirmation of product integrity
- List of ingredients
- Drug interaction and contraindication lookup
- Patient safety
- Expiration date reminders
- Product alerts, recall management
- Side effect reporting
- Intake logs
- Special offers
- Multiple language capabilities
- Serialization

### Features & Benefits

- Secure customer-facing or B2B product authentication
- Unique ID-based item level traceability
- Tag senses the “sealed” or “opened” state of the product or package and wirelessly transmits a unique identifier and status of the product’s seal
- Interactive mobile content can be customized based on sealed/opened status
- The first NFC solution adopted by the World Customs Organization
- Unlike QR codes or standard NFC labels, the NFC OpenSense tag ID is factory encoded, globally unique, and cannot be altered
- With the economic benefits and scalability of printed electronics, NFC OpenSense can be implemented on a wide range of products
- Connect to a secure database to track product lineage, provide analytics
- Physical to digital interactivity provides insight into buyer behaviour

### Key Products

- Pharmaceuticals
- Rx-to-OTC conversions
- Pain relievers
- Allergy medication
- Cough, cold and flu remedies
- Nutraceuticals and natural health products
- Vitamins
- Cosmeceuticals

### Key Specifications

- Streamlined Tag-Talks-First (TTF) protocol enables faster reads
- To thwart cloning, tag memory is permanently encoded and cannot be electrically modified
- 13.56 MHz High Frequency (HF) operation
- 128-bit Read Only Memory (roadmap to 256 bits)
- Adheres to subset of ISO 14443 Type-A RFID standard
- 106 Kbit/sec data transfer, Manchester bit encoding and OOK load modulation at 847 kHz
- 16-bit CRC for data integrity and verification
- Supported by the latest NFC controllers from leading manufacturers
- Passive operation; tag does not require a battery
- Can be combined with tamper evident adhesives and label facestocks for additional security