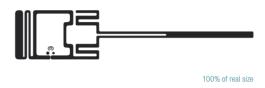


# **INVENGO GEM** DRY INI AY



NXP Ucode 8







# **About Invengo's GEM**

The Invengo GEM tags and inlays, equipped with the NXP Ucode 8 IC's, are designed to enable end-users to reach and sustain high levels of performance in all global RAIN RFID (UHF) frequency regions. Within the area of retail, smart packaging and supply chain management solutions, Invengo's GEM tags and inlays can be called one of the best in class.



Invengo – the global RFID technology provider – is a leading developer and manufacturer of high quality, intelligent RAIN RFID and HF/NFC connectivity solutions and consumables (tags & inlays) utilized in the Internet of Things. With a focus on RFID innovation, Invengo has created a leading product line in retail, (industrial) laundry, library, (public) transportation, healthcare, and many other industries.

Invengo Technology Pte. Ltd. (SG) is the International Headquarters of Invengo Information Technology Co., Ltd, listed on Shenzhen Stock Exchange (SZSE: 002161.SZ). Employing over 600 people globally, Invengo is one of the largest publicly traded, RFID / IoT oriented companies in the world.

## **Key Benefits**

- · Optimized size for small size hang tags
- Ideal inlay for tagging product boxes
- Serialized TID
- ISO 9001:2008 Quality Management System and ISO 14001:2004 Environment Management System support
- 100% Quality Tested

### **Application Areas**

- Retail
- Supply Chain Management
- Packaging

# **Product Specifications**

#### **RFID**

Protocols Supported ISO/IEC 18000-6C

EPCglobal C1G2

Integrated Circuit (IC) NXP Ucode 8
Operating Frequency 902 to 928MHz

EPC size 128 bits

TID 96 bits serialized number

Access password 32 bits
Kill password 32 bits

#### **Environmental**

 $\begin{array}{lll} \textbf{Operating Temperature} & -40^{\circ}\text{C to } 85^{\circ}\text{C (20\% to } 90\% \text{ RH)} \\ \textbf{Recommended} & -20^{\circ}\text{C to } 50^{\circ}\text{C (20\% to } 90\% \text{ RH)} \\ \textbf{Storage Temperature} & -40^{\circ}\text{C to } 85^{\circ}\text{C (20\% to } 90\% \text{ RH)} \\ \end{array}$ 

**Recommended**  $25^{\circ}\text{C} \pm 2^{\circ}\text{C} (65\% \text{ RH})$ 

Shelf Life Min. 2 yrs from date manufacturing

in 20°C (68°F) @ 50% RH

Bending Diameter > 50 mm, tension max. 10 N Static Pressure <10 MPa (10 N/mm2)

**ESD**  $\pm$  2000V peak

Adhesive Acrylic

Data retention 10 years

Endurance 100.000 cycles

### Dimensions

 $\begin{array}{lll} \textbf{Antenna Size (A x B)} & 63 \text{ x } 13 \text{ mm} \\ \textbf{Web Width (E)} & 77 \text{ mm } (0.90 \text{ in}) \\ \textbf{Pitch (F)} & 33.4 \text{ mm} \\ \textbf{PET Thickness} & 50 \text{ } \mu \text{m} \\ \textbf{Antenna Thickness} & 10 \text{ } \mu \text{m} \\ \textbf{Core Size (H)} & 76.2 \text{ } \text{mm} \\ \end{array}$ 

#### **Order Information**

**Product code** XC-TF8108-C107+ESK

Packaging Carton boxes

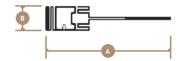
Box Size 350×350×180mm

Weight Please check with Invengo sales

Quantity pc p/roll; roll p/box 15000pcs/roll, 2rolls/box

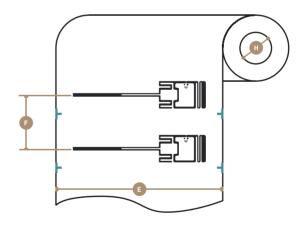
### **Inlay Design**

### **Inlay Stackup**





# Winding / Dimensions



#### APAC / EMEA

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