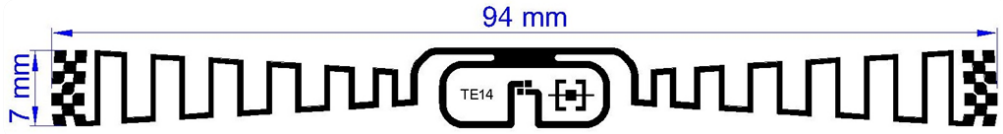


“TE14 THINPROPELLER” Inlay

Produced by Trace-Tech Id Solutions S.L.

Tag for Far-Field and Long Range Item or pallet Tagging



Overview

The TE14 features the Impinj Monza 4 chip, the Monza 4 family provides a variety of models to suit diverse applications, ushering in new standards in RFID privacy, tag orientation insensitivity, best and most consistent read/write performance, and memory capability.

Communication Protocol and Memory Specifications

Wireless Communication Protocol EPC Gen 2, ISO 18000-6C, ISO/IEC 15963 (UID standard). Protocol Class 1. Component Used Impinj Monza 4

IC NAME	Monza 4D	Monza 4E	Monza 4QT
EPC MEMORY	128 bits	496 bits	128 bits
USER MEMORY	32 bits	128 bits	512 bits
SERIALIZED TID	32 bits	32 bits	32 bits
RESERVED MEMORY (password, kill)	64 bits	64 bits	64 bits
READ SENSIBILITY LIMIT	-18 dBm	-18 dBm	-18 dBm
WRITE SENSIBILITY LIMIT	-14,6 dBm	-14,6 dBm	-14,6 dBm

Functional Specifications

Operating Frequency Band 860 - 960 MHz
 Read Range Typical $\geq 7m$ (270") with fixed reader and inlay mounted on cardboard
 Mode of Operation Passive, Backscattering Modulation

Environmental Specifications

Operating Temperature Range -40° C to +65° C at 40-80% RH
 Storage Temperature -40° C to +85° C at 40-80% RH
 Electrostatic Discharge (ESD) tolerance: 2.000V HBM (Human Body Model)

Features

- Optimized for item tracking in near-field and long range in far-field operation
- Enhanced anti-counterfeiting/anti-cloning capability.
- Applications include logistics, garments, and other assets.
- Aluminium inlay provides excellent performance at lower • costs than silver ink or copper; RoHS compliant

Dry Inlay Specifications

Substrate	50 micron PET
Metal Layer	Aluminum 99.8% pure
Pitch	16.4224 mm
Overall Inlay Thickness with IC	Max 210 μ m
Bending Diameter	≥ 15 mm, tension less than 6 N (1.35 lbf)



Wet Inlay Specifications

Die-cut size	97x12mm
Inlay Adhesive	Acrylic
Release liner	40#SCK
Pitch	16.4224 mm

