PARAG©N ID

EXPLORER Family EX7014 – R6/R6P





Overview

Application Area

Paragon ID EXPLORER Family of inlays are optimally designed for global item level Retail inventory management, Brand Protection and Supply Chain applications

IC

The EX7014-R6(P) UHF inlays are based on the Impinj Monza R6 Serie RAIN ICs with antenna designs supporting all global frequencies, including FCC and ETSI.

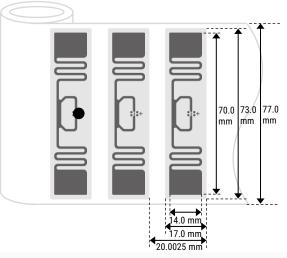
Paragon ID

Paragon ID is the largest EU based RFID inlay and label manufacturer with production facilities in Argent, France and Bucharest, Romania. Inlays are manufactured according to the highest ARC approved quality standards

Inlay specifications

| Standards | EPC Class1Gen2 V2 / ISO 18000-63 | | |
|---------------------|--|--|--|
| Certificates | ARC Compliant, specs: F, I, L, O, Q, R, W5, W6, Y2 | | |
| Antenna size | 70 x 14 mm / 2.76 x 0.55 in | | |
| Antenna orientation | Wide edge leading (WEL) | | |
| Substrate | PET 50 μm | | |
| Antenna material | Aluminum, 10 µm | | |
| Adhesive | Permanent | | |
| Backing | Silicon paper | | |
| Minimum Yield | 99% for dry inlays 98% for wet transparent & paperface inlays | | |
| Quality assurance | 100 % performance tested* | | |
| Marking | Failed units marked | | |
| Shelf life | Two years from date of manufacturing when stored at 20 °C and <40% relative humidity | | |
| | | | |

Dimensions



IC specifications

| Manufacturer | Impinj | | |
|--------------------------|---|--|--|
| Model and Memory | R6: 96 bits EPC R6P: 96 - 128 bits EPC, 64 - 32 bits User | | |
| TID memory | 96 bits, with 48 bits serial number | | |
| Read Sensitivity | -22.0 dBm | | |
| Write Sensitivity | -17.0 dBm | | |
| Operating Temperature | -40°C up to +85°C -40°F up to +185°F | | |

* Bad inlay can either be non-functional or show lower performances than expected

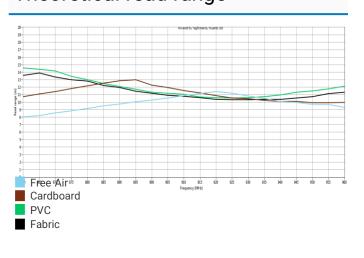


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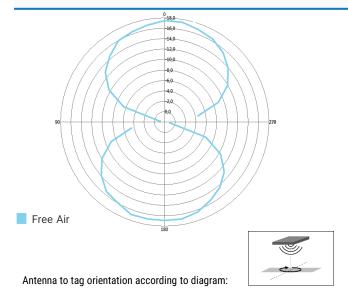


Theoretical read range



All graphs are generated under laboratory conditions. Real-life performance may vary. Reader power : 29 dBm. Antenna sensitivity : -70 dBm

Orientation sensitivity



Delivery information

| | Delivery Format | | | |
|-----------------------|-----------------------------|-----------------------------|-----------------------------|--|
| | Dry Inlay (2) | Wet Transparent Inlay | Paper-face Inlay | |
| Chip | R6 I R6P | R6 I R6P | R6 I R6P | |
| Sales Code | 135399 I 135400 | 135388 I 135389 | 135380 I 135381 | |
| Antenna size | 70 x 14 mm / 2.76 x 0.55 in | 70 x 14 mm / 2.76 x 0.55 in | 70 x 14 mm / 2.76 x 0.55 in | |
| Die-cut size | N/A | 73 x 17 mm / 2.87 x 0.67 in | 73 x 17 mm / 2.87 x 0.67 in | |
| Standard Pitch | 20.0025 mm / 0.79 in | 20.0025 mm / 0.79 in | 20.0025 mm / 0.79 in | |
| Web width | 77 mm / 3.03 in | 77 mm / 3.03 in | 77 mm / 3.03 in | |
| Core inner diameter | 76 mm / 2.99 in | 76 mm / 2.99 in | 76 mm / 2.99 in | |
| Quantity per roll (1) | 45 000 | 28 000 | 6 000 | |

(1) Quantity per Roll values are nominal with up to +/- 2% variation

(2) Delivered with disposable compensation layer (interleaves)



To ensure this product meets application requirements, this product should be tested under conditions appropriate to the application. Paragon ID does not warrant that this product is fit for any particular use or purpose. The information provided in this datasheet is believed to be reliable to our current experience and knowledge, no rights however can be derived from the information provided in this datasheet. Paragon ID reserves the right to change or discontinue product offerings at any time without notice.

