PARAGON ID

EXPLORER Family
EX4420 – M730/M750

RAIN RFID

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
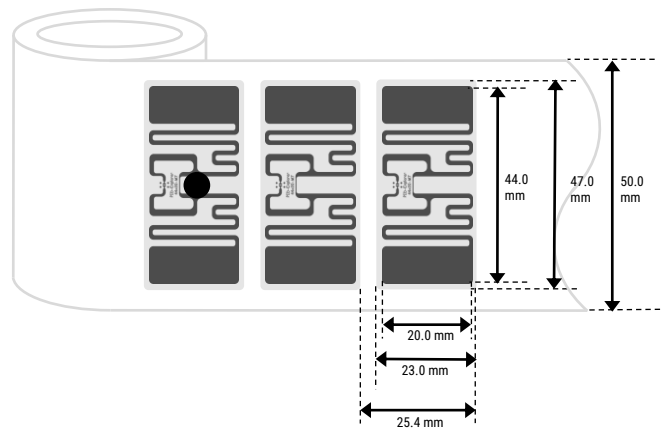
IC
The EX4420-M7 UHF inlays are based on the based on the Impinj Monza M700 Serie RAIN ICs with antenna designs supporting all global frequencies, including FCC and ETSI.

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

Dimensions

Inlay specifications

Standards	EPC Class1Gen2 V2 / ISO 18000-63
Certificates	ARC Compliant, specs: F, O, Q, R, W2, W5, W6, Y, Y2
Antenna size	44 x 20 mm / 1.73 x 0.79 in
Antenna orientation	Wide edge leading (WEL)
Substrate	PET 50 µm
Antenna material	Aluminium, 10 µm
Adhesive	Permanent
Backing	Silicon paper
Minimum Yield	98% or higher, 2 splices or less per roll
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

IC specifications

Manufacturer	Impinj
Model and Memory	M730: 128 bits EPC M750: 96 bits EPC, 32 bits User
TID memory	96 bits, with 48 bits serial number
Read Sensitivity	-24.0 dBm
Write Sensitivity	-21.0 dBm
Operating Temperature	-40°C up to +85°C -40°F up to +185°F

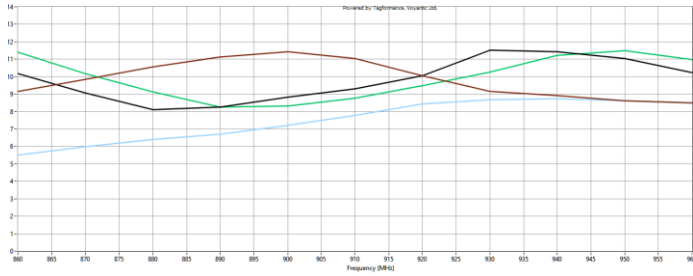* Bad inlay can either be non-functional or show lower performances than expected

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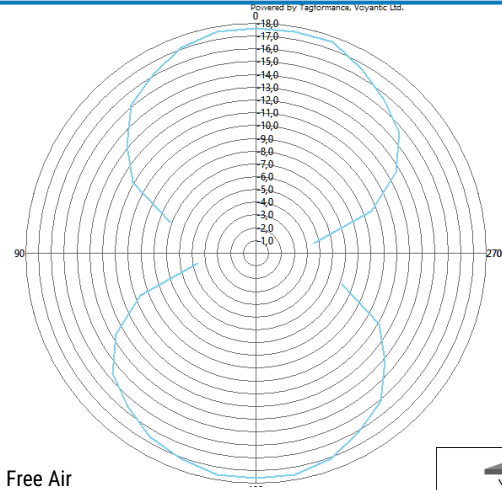
RAIN RFID

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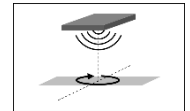
Theoretical read range

- ■ Free Air
- ■ Cardboard
- ■ PVC
- ■ Fabric

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

Orientation sensitivity

- ■ Free Air

Antenna to tag orientation according to diagram:

Delivery information

	Delivery Format		
	Dry Inlay (2)	**Wet Transparent Inlay**	**Paper-face Inlay**
Chip	M730 I M750	M730 I M750	M730 I M750
Sales Code	134681 I 135489	135487 I 135488	134735 I 135484
Antenna size	44 x 20 mm / 1.73 x 0.79 in	44 x 20 mm / 1.73 x 0.79 in	44 x 20 mm / 1.73 x 0.79 in
Die-cut size	N/A	47 x 23 / 1.85 x 0.91 in	47 x 23 / 1.85 x 0.91 in
Standard Pitch	25.40 mm / 1.00 in	25.40 mm / 1.00 in	25.40 mm / 1.00 in
Web width	56.5 mm / 2.22 in	50 mm / 1.97 in	50 mm / 1.97 in
Core inner diameter	76 mm / 2.99 in	76 mm / 2.99 in	76 mm / 2.99 in
Quantity per roll (1)	20 000	10 000	4 000

(1)   Quantity per Roll values are nominal with up to +/- 2% variation
(2)   Delivered with disposable compensation layer (interleaves)

ROHS   REACH

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