

EXPLORER Family

EX4420 – M730/M750



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

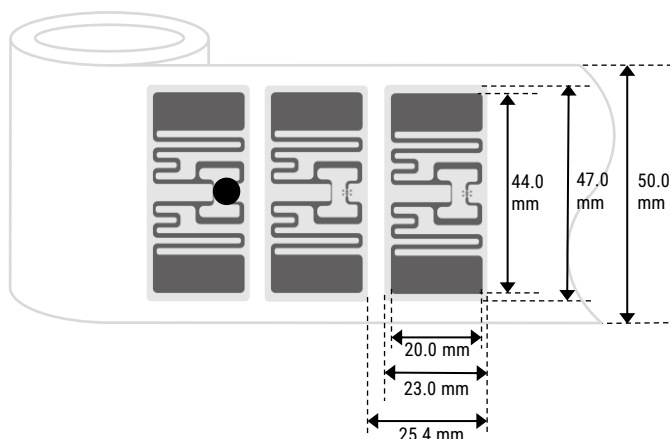
IC

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, W5, W6, 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	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

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

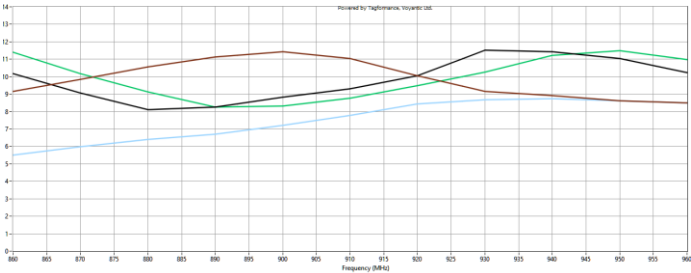
* Bad inlay can either be non-functional or show lower performances than expected



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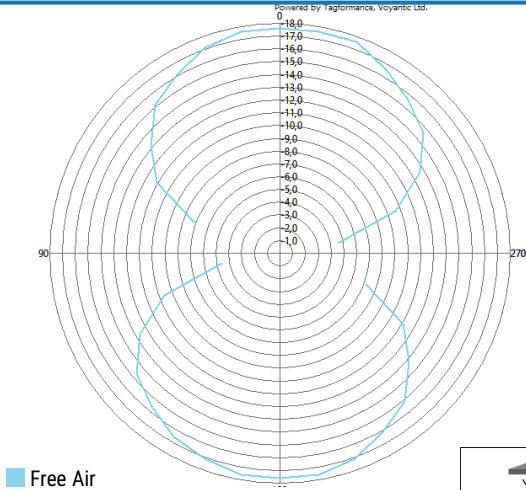
Theoretical read range



Free Air
Cardboard
PVC
Fabric

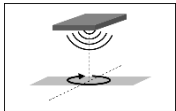
All graphs are generated under laboratory conditions. Real-life performance may vary. Reader power : 29 dBm. Antenna sensitivity : -70 dBm

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 M750	M730 M750	M730 M750
Sales Code	135588 136001	135487 135488	134735 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	50 mm / 1.97 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)	35 000	22 000	4 000

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

