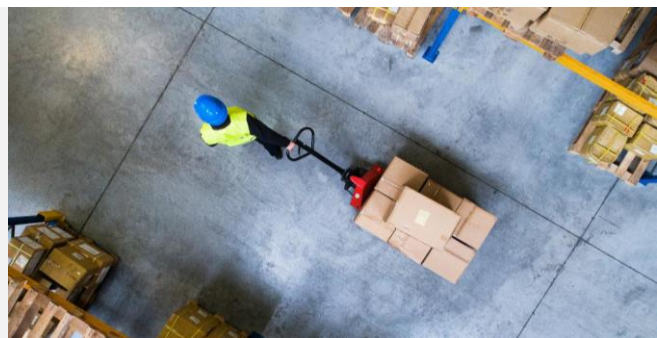


RANGER Family

RA9508 – U8



Overview

Application Area

Paragon ID Ranger Family of inlays are designed to function in a wide range of industrial applications that require long read distances in combination with the use of the inlay on many different materials

IC

The RA9508-U8 UHF inlays are based on the NXP UCODE 8 Serie RAIN ICs with antenna designs supporting all global frequencies, including FCC and ETSI.

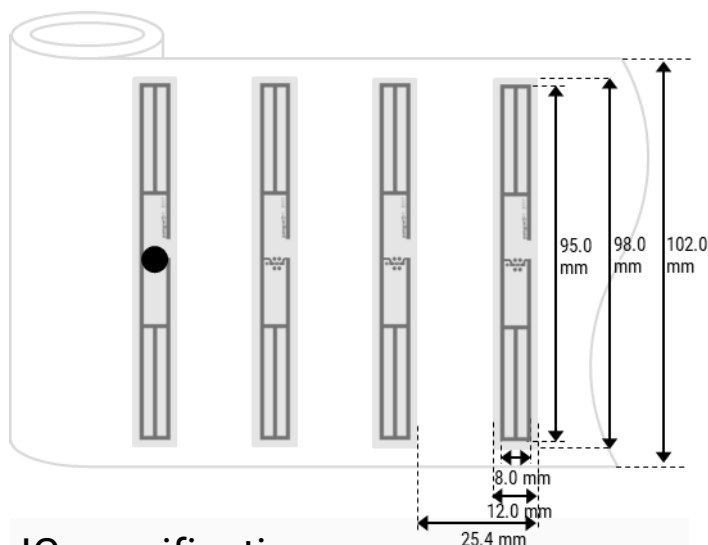
Paragon ID

Paragon ID is the largest EU based RFID inlay and label manufacturer with production facilities in Argent, France and Bucharest, Romania.

Inlay specifications

Standards	EPC Class1Gen2 V2 / ISO 18000-63
Certificates	Not applicable
Antenna size	95 x 8 mm / 3.74 x 0.31 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
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	NXP
Model and Memory	U8: 128 bits EPC U8m: 96 bits EPC, 32 bits User
TID memory	96 bits, with 48 bits serial number
Read Sensitivity	-23,0 dBm
Write Sensitivity	-18,0 dBm
Operating Temperature	-40°C up to +85°C -40°F up to +185°F

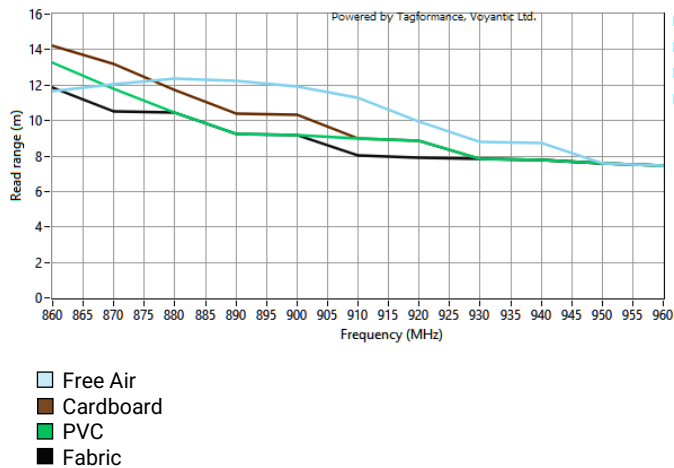
* Bad inlay can either be non-functional or show lower performances than expected

RANGER Family

RA9508 – U8

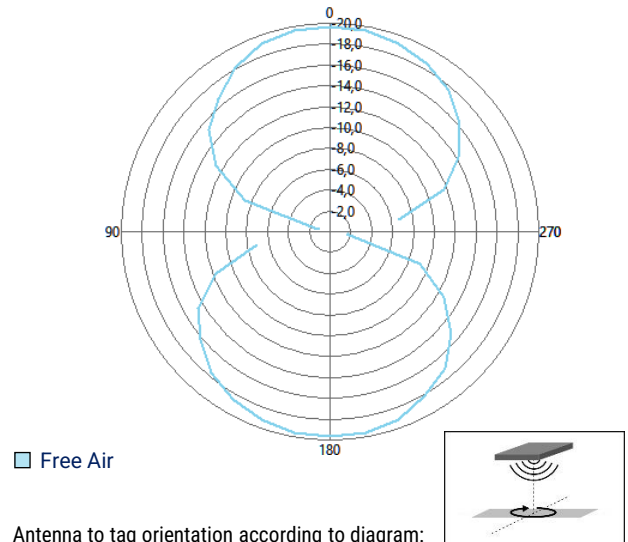


Theoretical read range



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	U8 (3)	U8	U8
Sales Codes	126048	126845	134108
Antenna size	95 x 8 mm / 3.74 x 0.31 in	95 x 8 mm / 3.74 x 0.31 in	95 x 8 mm / 3.74 x 0.31 in
Die-cut size	N/A	98 x 12 mm / 3.86 x 0.47 in	98 x 12 mm / 3.86 x 0.47 in
Standard Pitch	25.40 mm / 1.00 in	25.40 mm / 1.00 in	25.40 mm / 1.00 in
Web width	108.5 mm / 4.27 in	102 mm / 4.02 in	102 mm / 4.02 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	5 000

- (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.