

SPECIFICATION

Part No.	:	PC91.07.0100A.db
Product Name	:	TheStripe™ 915Mhz PCB Antenna 100mm IPEX 1.13mm diameter MHF connector with foam attachment for assembly
Features	:	34*7*0.8mm(PCB) 13*6*7mm(foam) Compatible with Hirose U.FL



1. Introduction

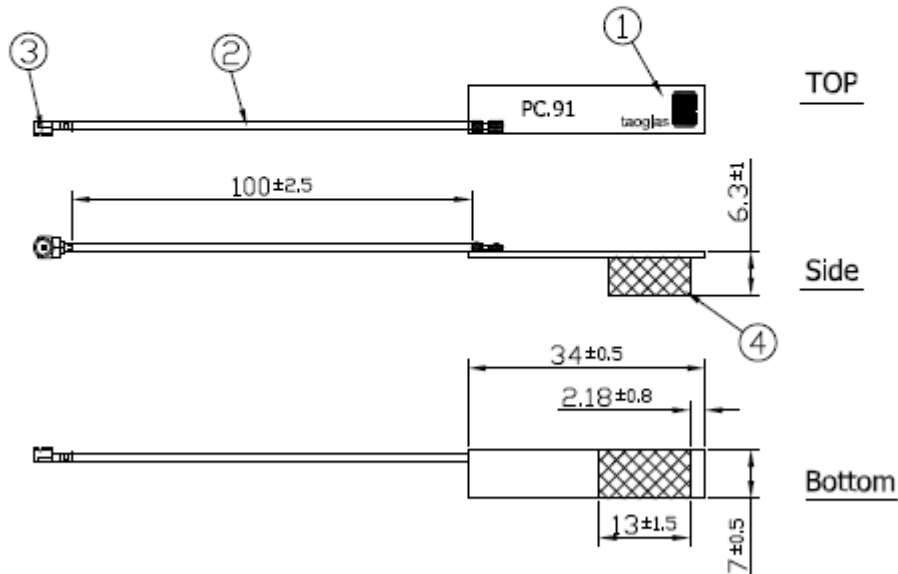
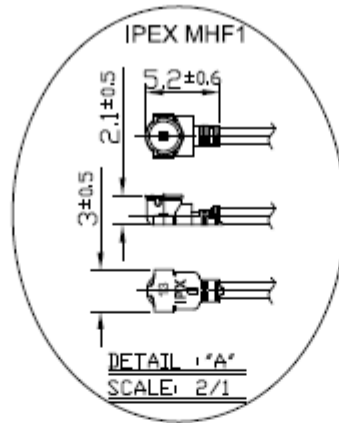
This miniaturized low profile PCB antenna is based on smart TheStripe™ antenna technology. It consists of a PCB antenna and 1.13mm mini coaxial cable with Ipex MHF (Hirose U.FL comp) connector.



2. Typical Antenna Performance in free space

Parameter	Specification
Applications	915MHz ISM Band
Frequency Band	902-928MHz
Efficiency	52%
Return Loss	<-10dB
VSWR	<2.0:1
Impedance	50 Ohm
Polarization	Horizontal
Radiation Pattern	Omnidirectional

3. Mechanical Dimensions

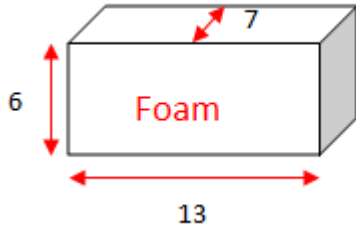
3.1 Dimensions and Drawing(FR4 PCB)



- NOTES:**
 1.NO DREGS OR INSUFFICIENT SOLDERING. SOLDER THICKNESS 0.3-1.7mm
 2.THE SOLDER MUST BE SMOOTH AND FULL TO THE EDGES OF THE PAD.
 THE SOLDER MUST NOT EXTEND OUTSIDE OF THE PAD AREA.
 3.THE CONNECTOR POSITION HAS SPECIAL ORIENTATION TO THE PCB AS PER DRAWING.
 4,SOLDERED AREA, 
 5,FOAM 
 6,ALL MATERIAL MUST BE ROHS COMPLIANT.
 7,OPEN/SHORT,INSERTION LOSS QC, VSWR REQUIRED.

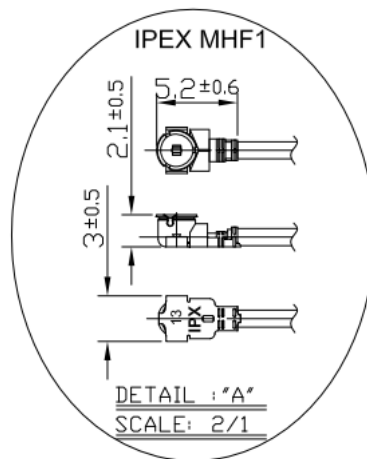
Name	PIN	Material	Finish	QTY
1 PCB1 PCB	100211CD400XXA	FR4 0.8	Black	1
2 1,13 Coaxial Cable	00,113,J	FEP	Black	1
3 IPEX MHF1	IPEX.MHF1.113	Brass	Gold	1
4 Double Sided Adhesive + Closed Cell Foam	0010C000000A	CR4305-3M 9472	Black	1

3.2 Dimensions and Drawing(foam)



3.3 Cable & Connector

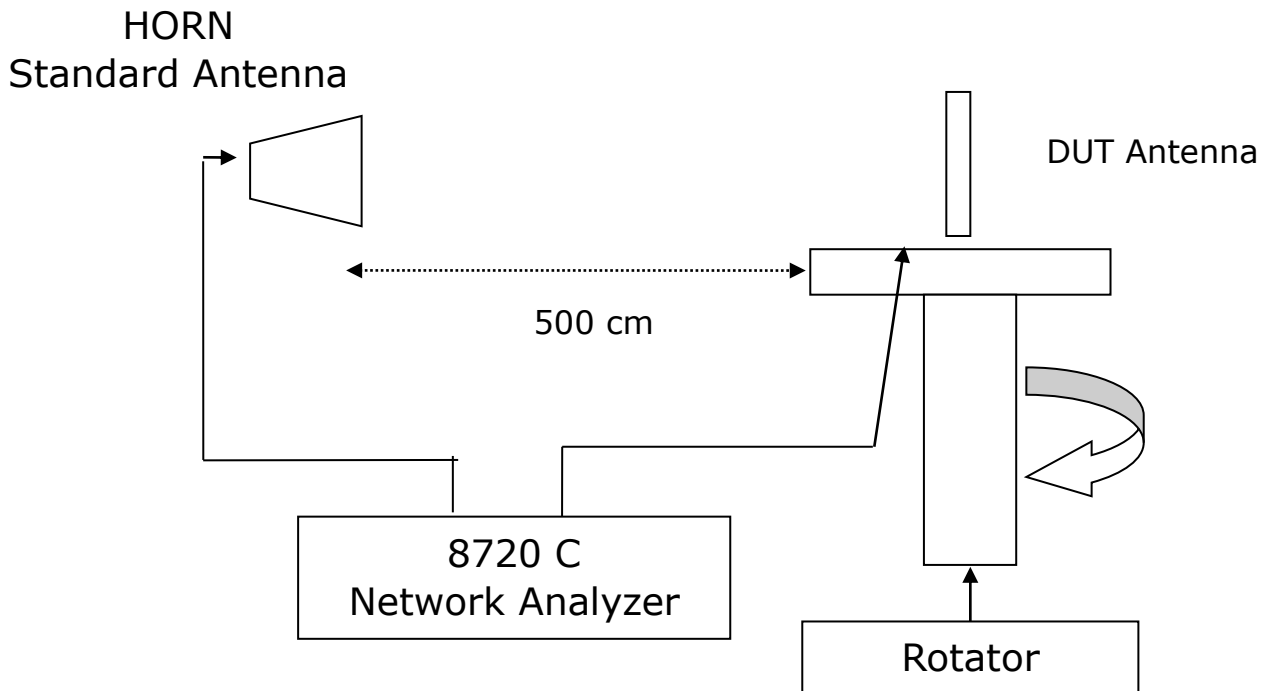
3.2.1	RF Cable	Ø1.13 Coaxial Cable L = 100 +/- 3 mm
3.2.2	RF Connector	IPEX MHF (U.FL compatible)



4. Antenna Test Setup and Results

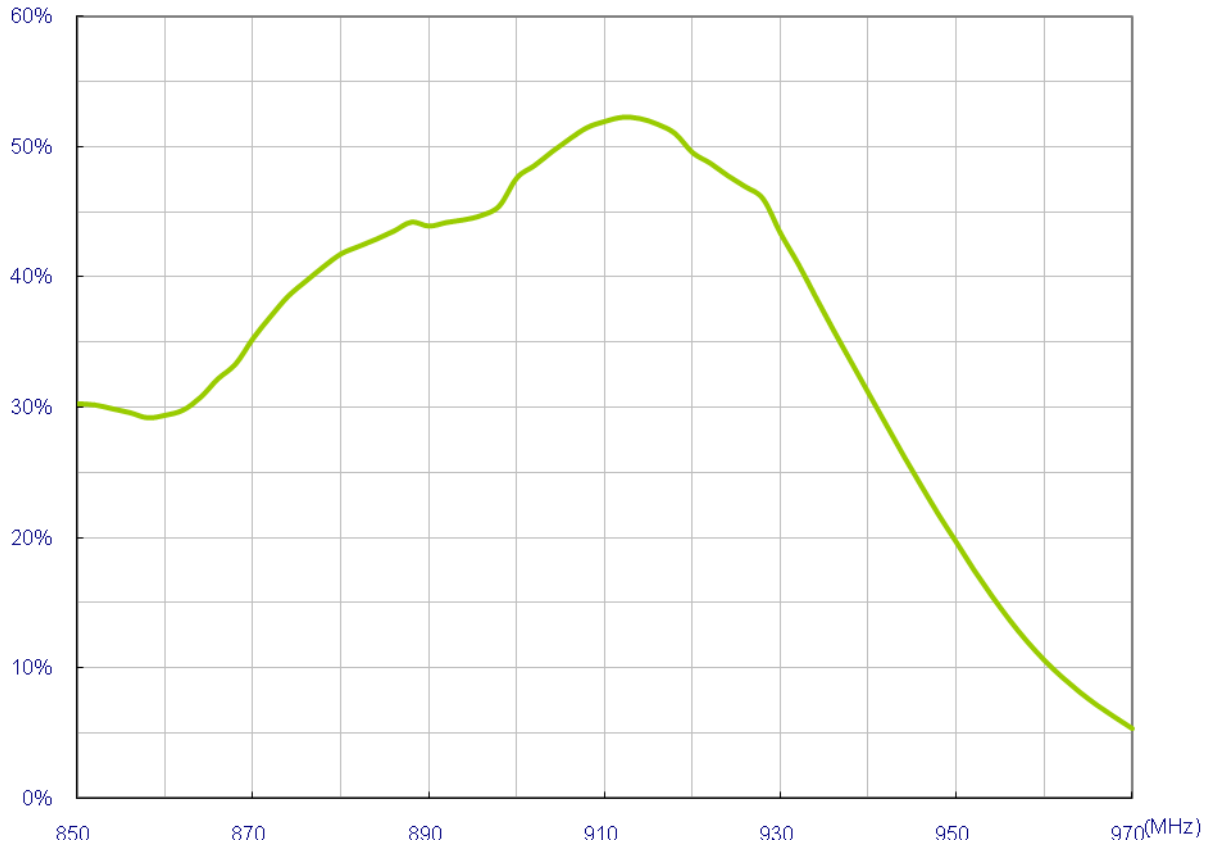
4.1 Equipment

Radiation Pattern Testing - Anechoic Chamber



4.2 Efficiency

Efficiency of PC.91 with 100mm coaxial in free space

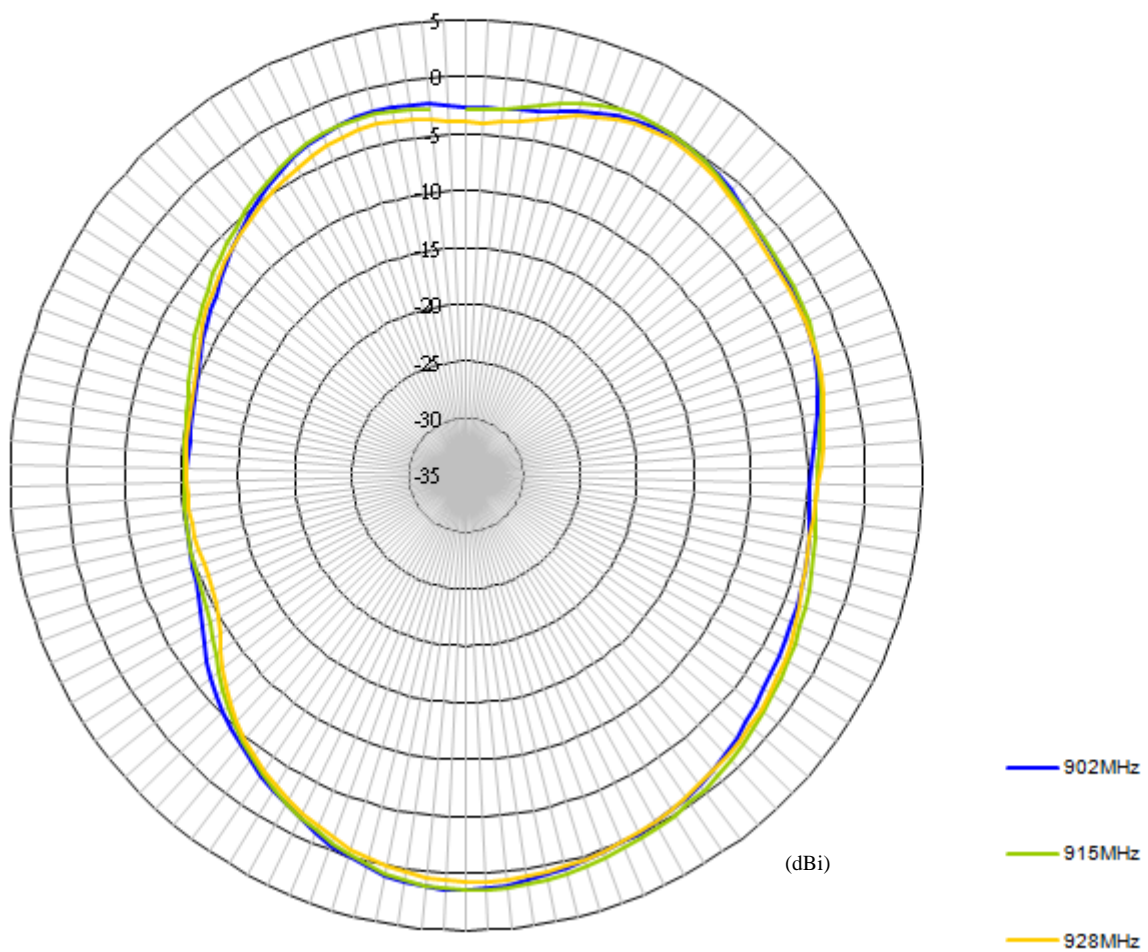


PC.91 Efficiency Data													
Band (MHz)	850	860	870	880	890	900	910	920	930	940	950	960	970
Gain (dBi)	-0.13	-0.23	0.85	1.72	1.89	2.26	2.67	2.42	1.74	0.14	-1.94	-4.74	-7.54
Efficiency (%)	30.26	29.37	35.3	41.74	43.87	47.57	51.89	49.49	43.29	31.06	19.61	10.6	5.35
Efficiency (dB)	-5.19	-5.32	-4.53	-3.79	-3.58	-3.23	-2.85	-3.06	-3.64	-5.08	-7.07	-9.75	-12.72

4.3 Radiation Patterns

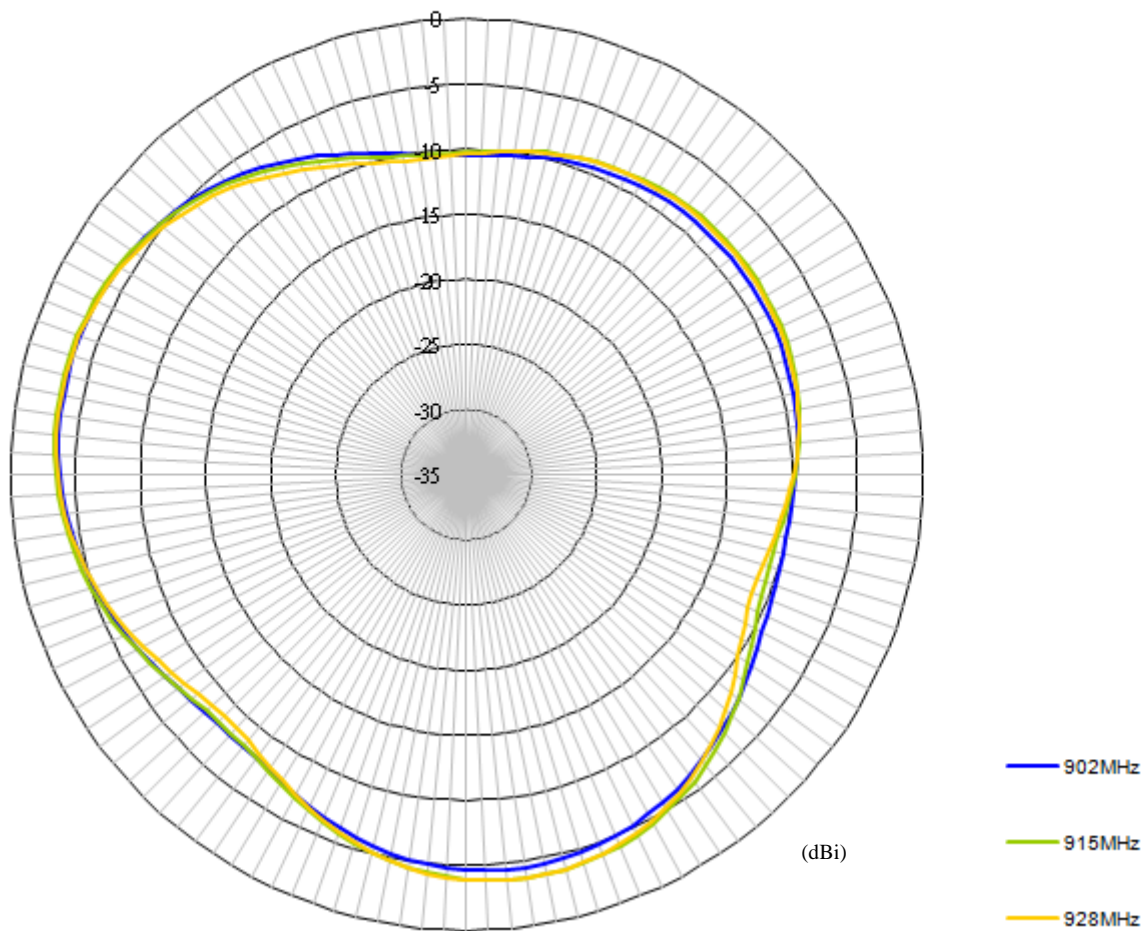
4.3.1 E-Plane (Horizontal/Azimuth Plane)

FC.91 E-plane Radiation



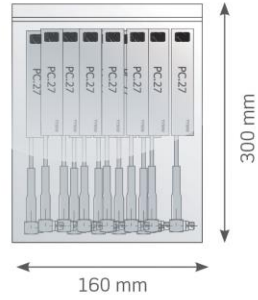
4.3.2 H-Plane (Vertical/Elevation Plane)

FC.91 H-plane Radiation

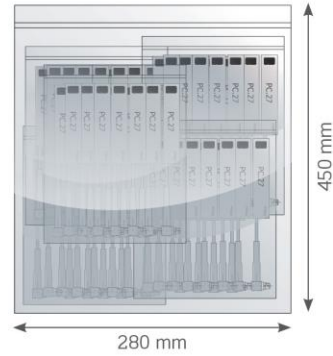


5. Packaging (Unit: mm)

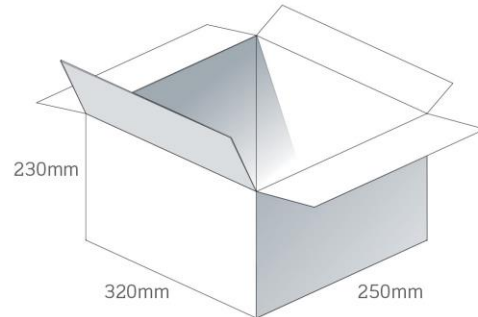
100pc PC91.07.0100A.db per PE Bag
 Bag Dimensions - 300 x 160mm
 Weight - 103g



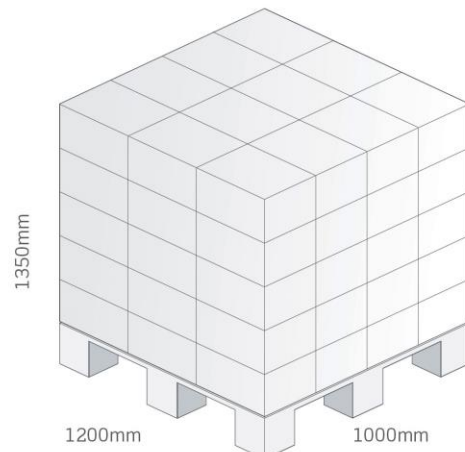
1000pcs PC91.07.0100A.db per PE Large Bag
 Bag Dimensions - 450 x 280mm
 Weight - 1.03kg



2000 pcs PC91.07.0100A.db per carton
 Carton - 320 x 250 x 230mm
 Weight - 2.08Kg



Pallet Dimensions 1200x 1000 x 1350mm
 60 Cartons per Pallet
 12 Cartons per layer
 5 Layers



Taoglas makes no warranties based on the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Taoglas reserves all rights to this document and the information contained herein.

Reproduction, use or disclosure to third parties without express permission is strictly prohibited.

Copyright © Taoglas Ltd.