

**Data Sheet**



**M-Shield Tag**

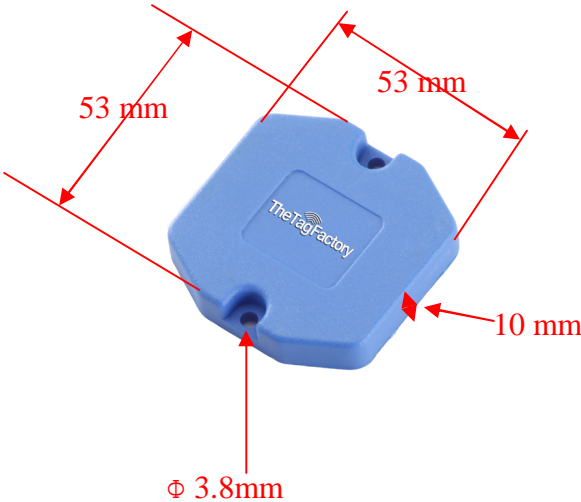
**FEATURES**

- M-Shield tag is operates effectively with read range of over 10m when attached to metal.
- Rugged construction for high durability.
- Can be attached by screws with the help of two holes.
- Can also be provided with Adhesive tape for easy attachment.

**APPLICATIONS**

- Due to high read range, M-Shield can be effectively used in asset tracking, Ware house management, Containers and Railway Coaches identification.
- Factory automation, Automotive & Security purpose.

<b>Chip Type:</b>	<b>UHF Class 1 Gen 2, Alien Higgs 3</b>	
	EPC 96 bit extendable up to 480 bits	
	User Memory 512 bit	
	Data retention of 50 years	
	Write endurance 100,000 cycles	
<b>Mechanical:</b>	Dimension	53 x 53 x 10mm
	Material	ABS
	Colour	Blue
	Weight	21 g
<b>Electrical:</b>	Operating Frequency	865-868MHz, (902-928MHz also available on request)
	Operating mode	Passive (battery-less transponder)
<b>Ingress Protection:</b>	IP67	
<b>Thermal:</b>	Storage Temp.	-40°C to +85°C
	Operating Temp.	-40°C to +85°C
<b>Part Number:</b>	317V3	
<b>Options:</b>	Available with:	
	Other IC type on request	
	Other plastic material and colours	
	Adhesive backing for easy mounting (indoor application)	



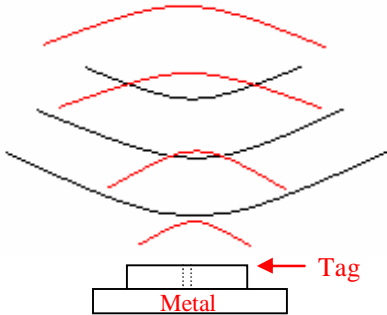
Tag Placement

- ✚ M-Shield is polarized perpendicular to TTF logo.
- ✚ Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- ✚ Ensure that there is no hindrance between the tag and the reader antenna.
- ✚ Reader antenna should be perpendicular to the axis of tag hole as shown in below figure:

Correct way



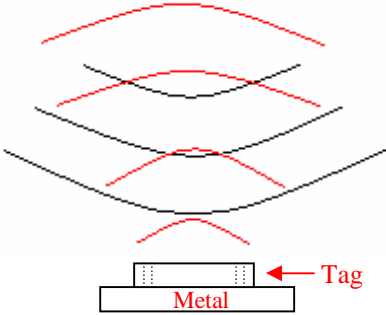
Antenna



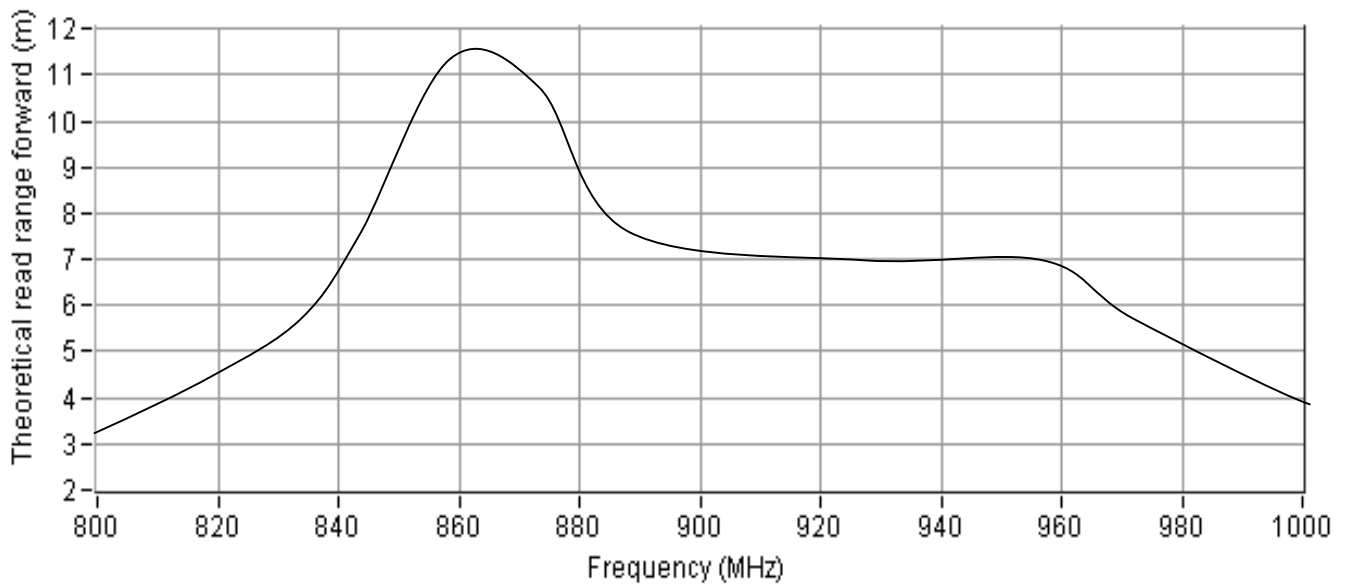
Wrong way



Antenna



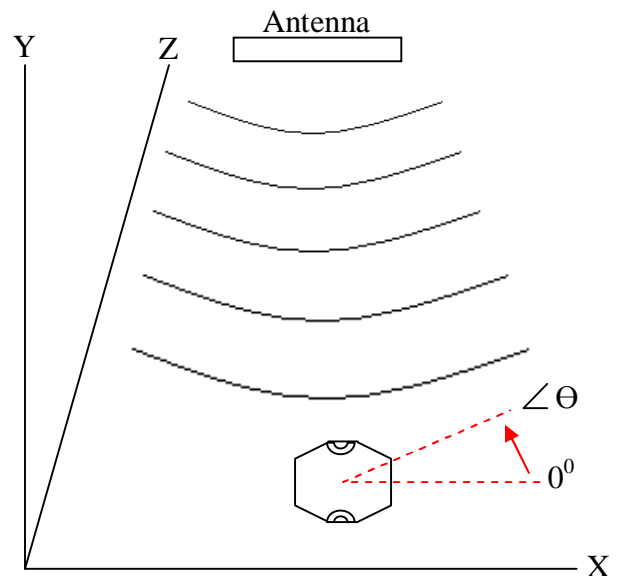
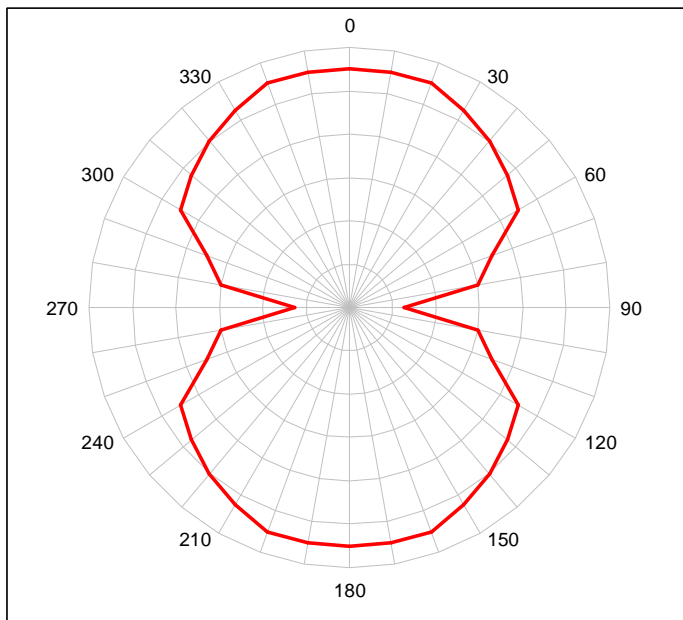
## Frequency v/s Read Range Graph



## Angular Sensitivity

### M-Shield Tag Angular Sensitivity

(Relative Read Range vs. Orientation)



Tag is rotated in the X-Y plane about the z axis

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