



## M-Superior Tag

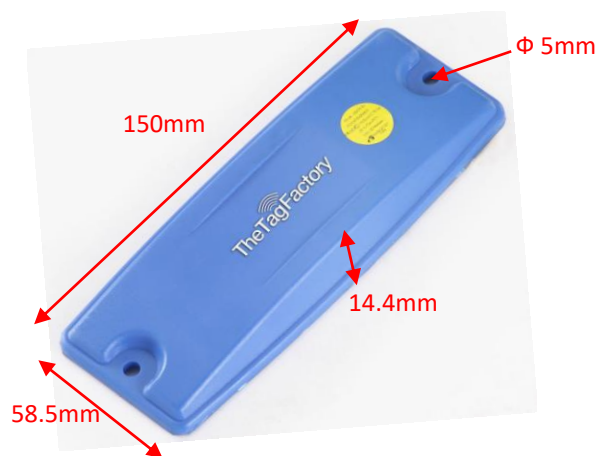
### FEATURES

- M-Superior Tag is ATEX approved and thus can be used in potentially explosive atmosphere.
- M-Superior is a frequency independent tag and operates effectively with read range of over 15m 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-Superior can be effectively used in asset tracking, Ware house management, Containers and Railway Coaches identification in any part of the world irrespective of frequency used in country.
- Factory automation, Automotive & Security purpose.

<b>Chip Type:</b>	<b>Impinj Monza 4QT EPC Class 1 Gen 2</b>	
	EPC 96 bit extendable up to 128 bits	
	User Memory 512 bit	
	Data retention of 50 years	
	Write endurance 100,000 cycles	
<b>Mechanical:</b>	Dimension	150 x 58.5 x 14.4 mm
	Material	ABS
	Colour	Blue
	Weight	73 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.	-20°C to +70°C
	Operating Temp.	-20°C to +70°C
<b>Part Number:</b>	344V1-Ex04	
<b>Atex Marking details:</b>	II 1 G, Ex ia IIC T5 Ga	
<b>Options:</b>	Available with:	
	Other IC type e.g. Monza 4D, Monza 4E	
	Other plastic material and colours e.g. PC/ABS	
	Adhesive backing for easy mounting	



Note: Tolerance applicable are Length:  $\pm 1\text{mm}$ , Width:  $\pm 0.5\text{mm}$  and Thickness:  $\pm 0.3\text{mm}$

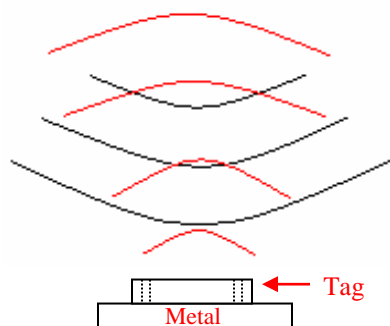
## Tag Placement

- ✚ M-Superior is polarized parallel to line joining its two holes.
- ✚ 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 parallel to the tag length as shown in below figure:

Correct way



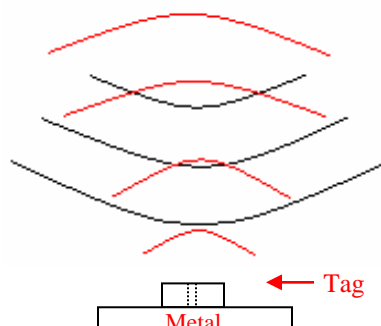
Antenna



Wrong way

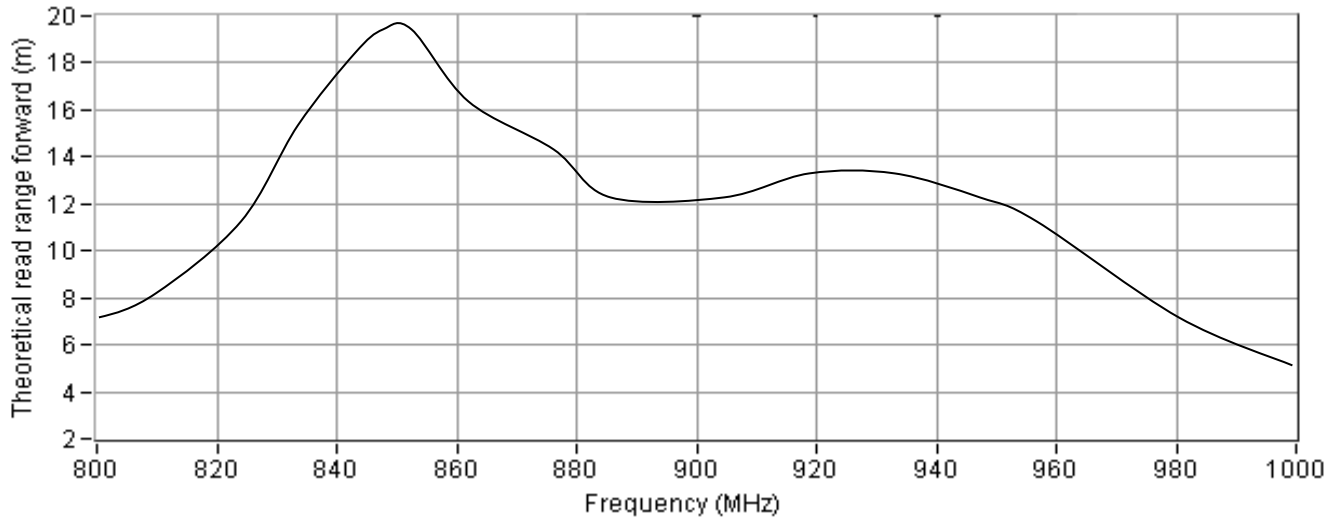


Antenna



- ✚ Tag can be attached either through screw M5/ Rivets / Adhesive tape.
- ✚ Attachment through adhesive should be used only for indoor application.

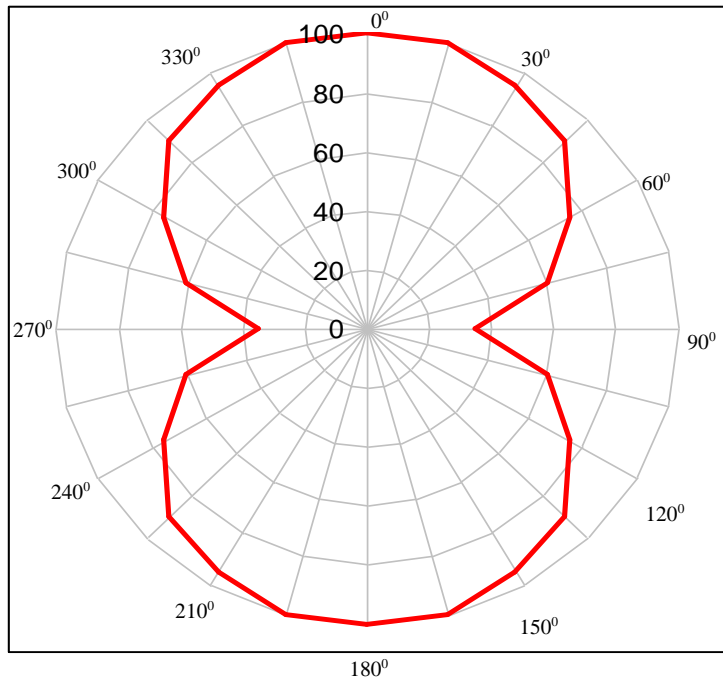
## Frequency v/s Read Range Graph



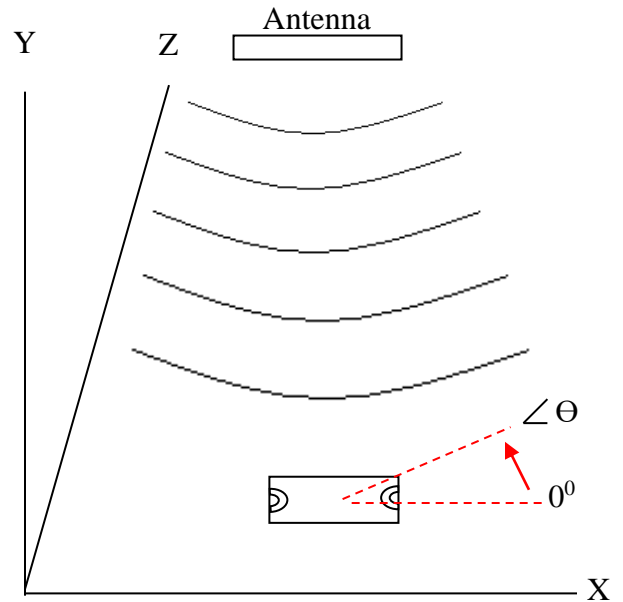
## Angular Sensitivity

### M-Superior Tag Angular Sensitivity

(Relative Read Range vs. Orientation)



Read range (in percent) at various angle.



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