



## M-King Tag

### FEATURES

- M-King tag operates effectively with read range of over 8m when attached to metal.
- Rugged construction for high durability.
- Can be provided with Adhesive tape for easy attachment.

### APPLICATIONS

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

<b>Chip Type:</b>	<b>Impinj Monza 4QT EPC Class 1 Gen 2</b>	
	<b>EPC Memory:</b> 96 bits extendable up to 128 bits	
	<b>User Memory:</b> 512 bits	
	<b>Data Retention:</b> 50 years	
	<b>Write Endurance:</b> 100,000 cycles	
<b>Mechanical:</b>	<b>Dimension</b>	Dia. 62mm, thickness 10mm
	<b>Material</b>	ABS
	<b>Colour</b>	Blue
	<b>Weight</b>	25 gm.
<b>Electrical:</b>	<b>Operating Frequency</b>	865-868MHz, (902-928MHz also available on request)
	<b>Operating mode</b>	Passive (battery-less transponder)
<b>Ingress Protection:</b>	IP67	
<b>Thermal:</b>	<b>Storage Temp.</b>	-25°C to +85°C
	<b>Operating Temp.</b>	-25°C to +85°C
<b>Part Number:</b>	309V6	
<b>Options:</b>	<b>Available with:</b>	
	Other IC type on request (e.g. Monza 4D, Monza 4E)	
	Other plastic material and colours	
	Adhesive backing for easy mounting (indoor application)	



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

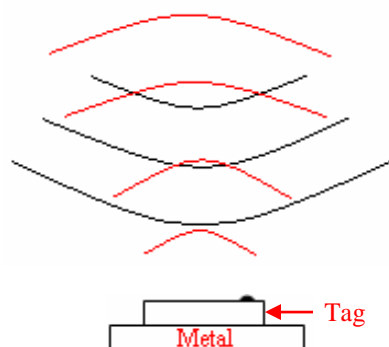
## Tag Placement

- ✚ M-King is polarized parallel to rectangle in the tag.
- ✚ 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 axis of the rectangle in the tag as shown in below figure:

Correct way



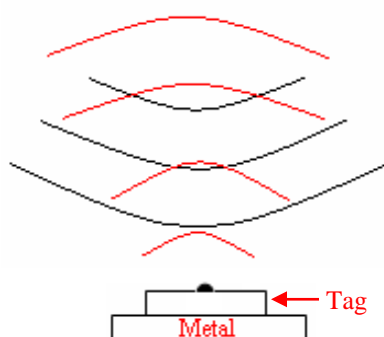
Antenna



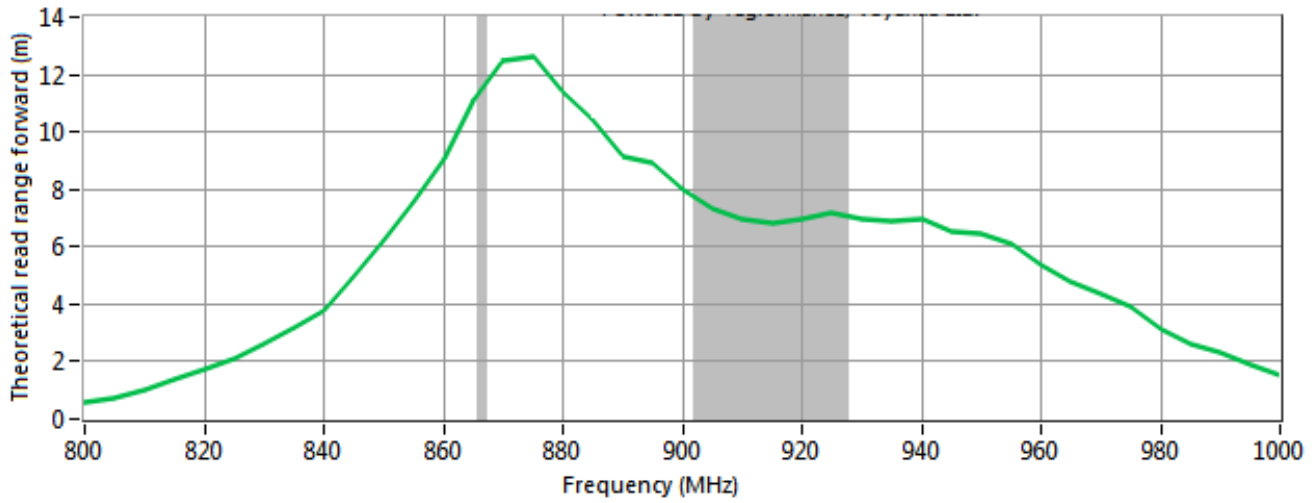
Wrong way



Antenna

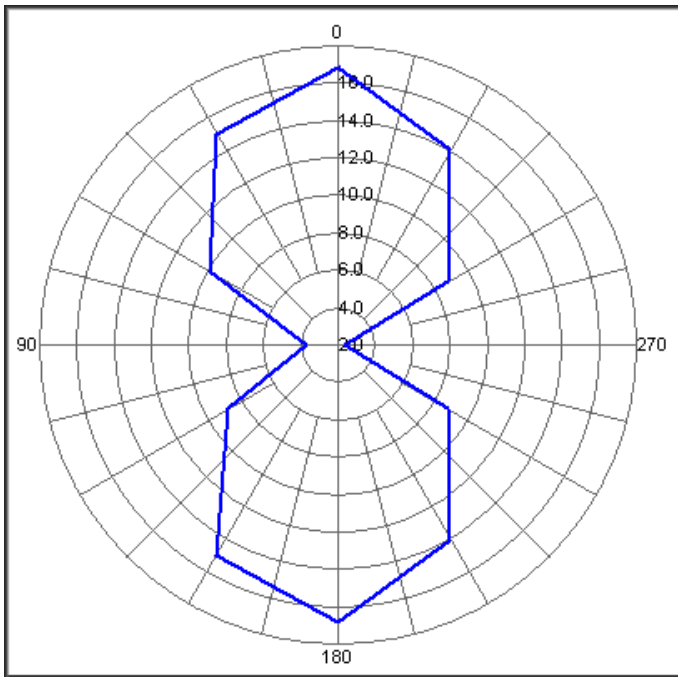


## Frequency v/s Read Range Graph

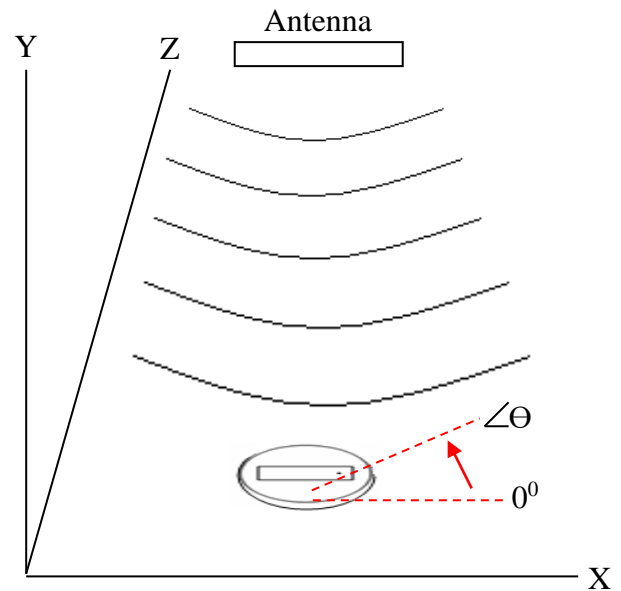


## Angular Sensitivity

### M-King Tag Angular Sensitivity (Relative Read Range vs. Orientation)



Read range (in meter) at various angle



Tag is rotated in X-Y plane about the