



## 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, Warehouse 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>Alien Higgs 9, GS1 Class 1 Gen 2</b>	
	<b>EPC Memory:</b>	Up to 496-EPC Bits (nominally 96 bits)
	<b>User Memory:</b>	Up to 688 Bits
	<b>Data Retention:</b>	50 Years
	<b>Write Endurance:</b>	200,000 Cycles

<b>Mechanical:</b>	<b>Dimension</b>	150 x 58.5 x 14.4 mm
	<b>Material</b>	ABS
	<b>Colour</b>	Blue
	<b>Weight</b>	73 g

<b>Electrical:</b>	<b>Operating Frequency</b>	865-868Mhz, (902-928Mhz also available on request)
	<b>Operating mode</b>	Passive (battery-less transponder)

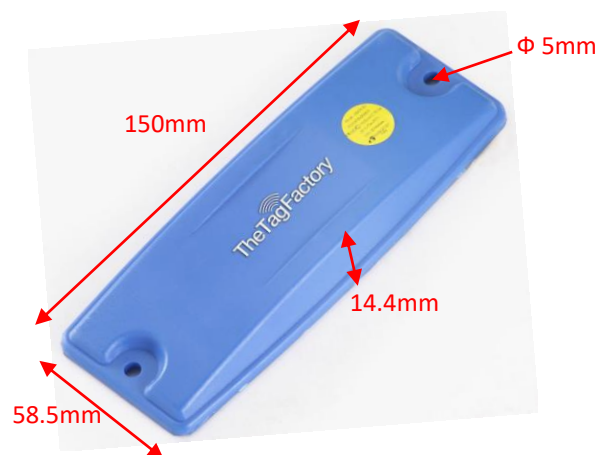
<b>Ingress Protection:</b>	IP67
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<b>Thermal:</b>	<b>Storage Temp.</b>	-20°C to +70°C
	<b>Operating Temp.</b>	-20°C to +70°C

<b>Part Number:</b>	344V1-Ex01
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<b>Atex Marking details;</b>	II 1 G, Ex ia IIC T5 Ga
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<b>Options:</b>	<b>Available with:</b>
	Other IC type
	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:  $\pm 0.3\text{mm}$

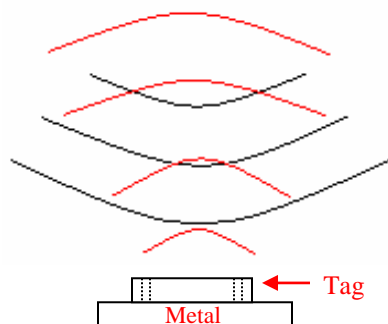
## Tag Placement

- ✚ 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



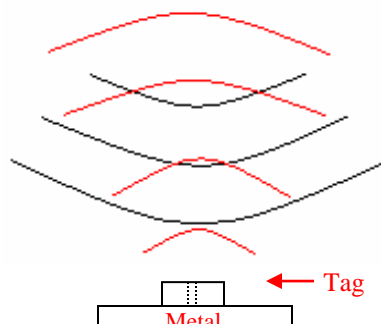
Antenna



Wrong way



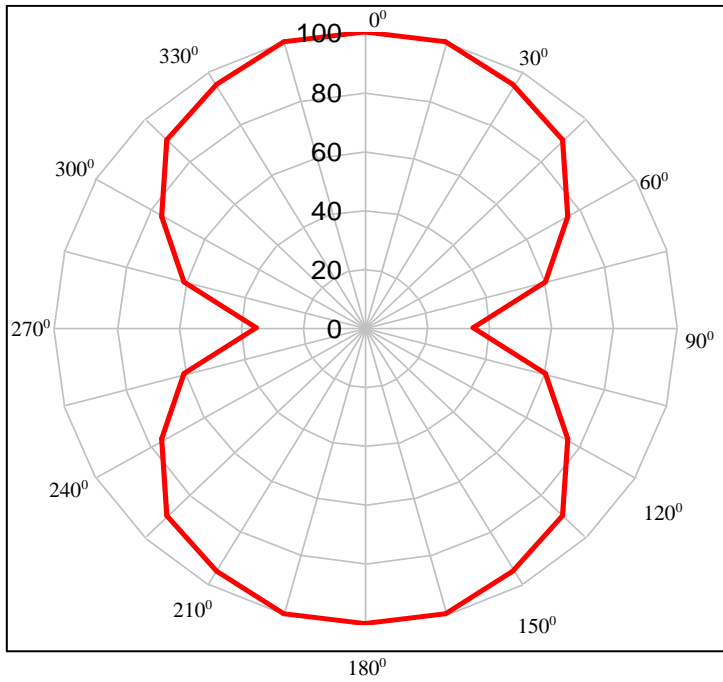
Antenna



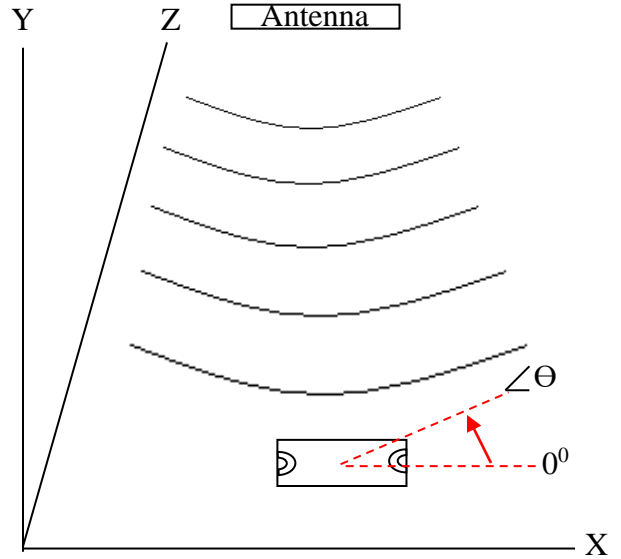
- ✚ Tag can be attached either through screw M5/ Rivets / Adhesive tape.
- ✚ Attachment through adhesive should be used only for indoor application.

### 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