



## M-Superior Tag

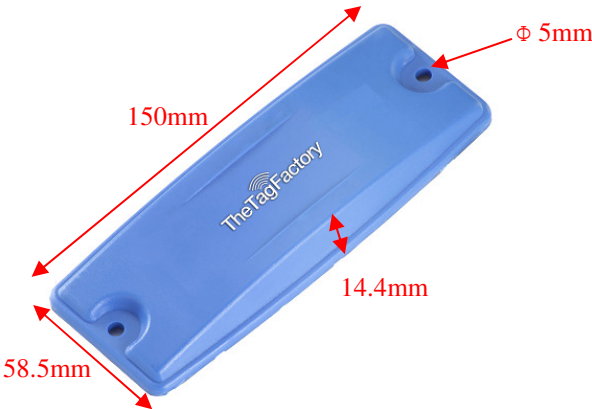
### FEATURES

- M-Superior tag operates effectively with good 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

- Used in asset tracking, Ware house management, Containers and Railway Coaches identification.
- Factory automation, Automotive & Security purpose.

|                            |   |  |
|----------------------------|---|--|
| <b>Chip Type:</b>          | <b>Alien Higgs 3 EPC Class 1 Gen 2; ISO 18000-6C protocol compliant</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   | 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.   | -40°C to +85°C                                     |
|                            | Operating Temp.   | -40°C to +85°C                                     |
| <b>Part Number:</b>        | 344V1   |  |
| <b>Options:</b>            | Available with:   |  |
|                            | Other IC type   |  |
|                            | Other plastic material and colours e.g. PC/ABS                          |  |
|                            | Adhesive backing for easy mounting                                      |  |



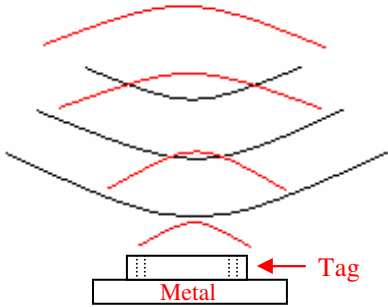
Tag Placement

- ✚ 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



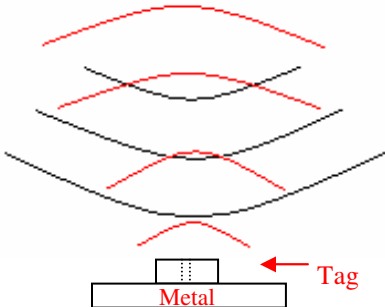
Antenna



Wrong way

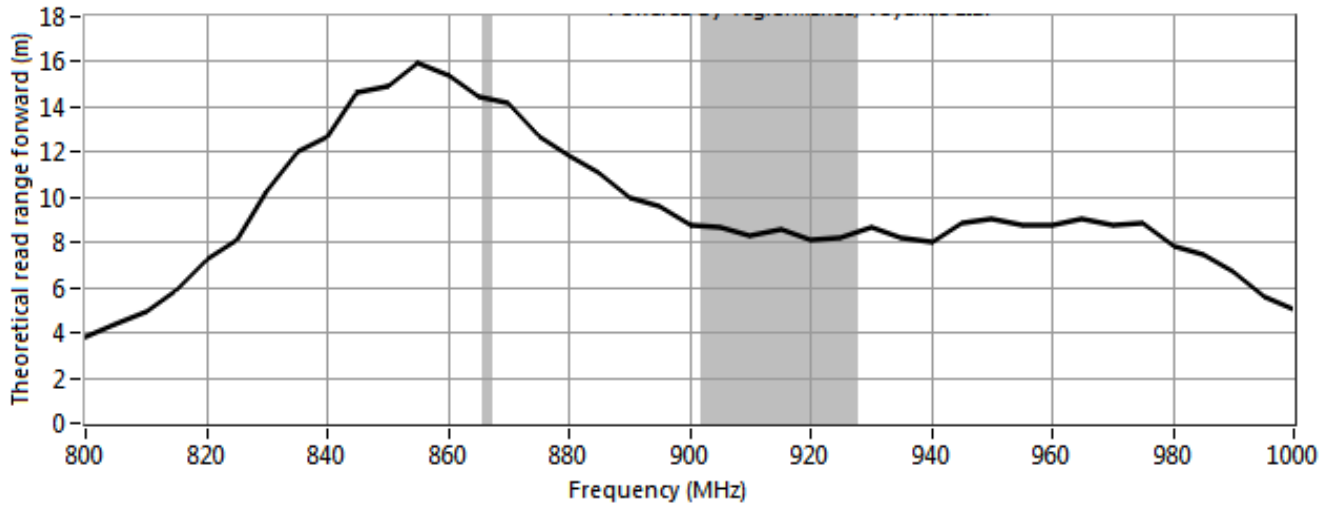


Antenna



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

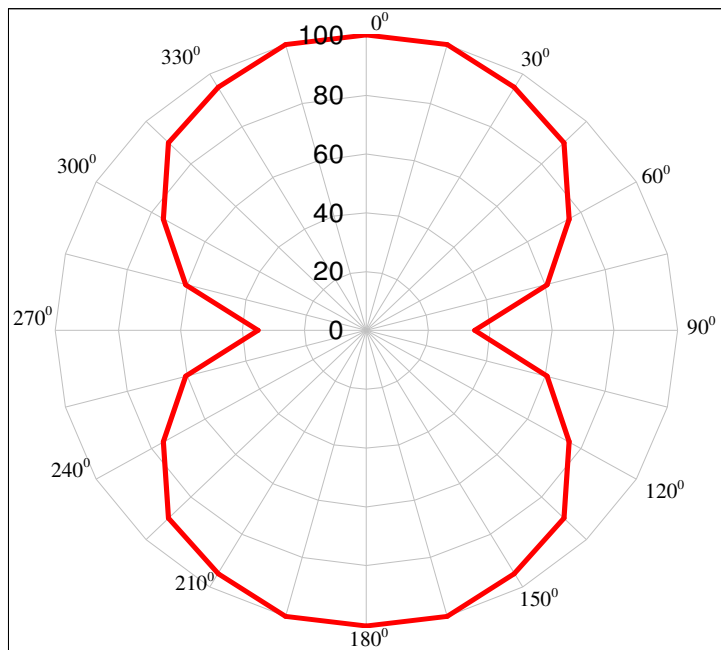
## Frequency v/s Read Range Graph



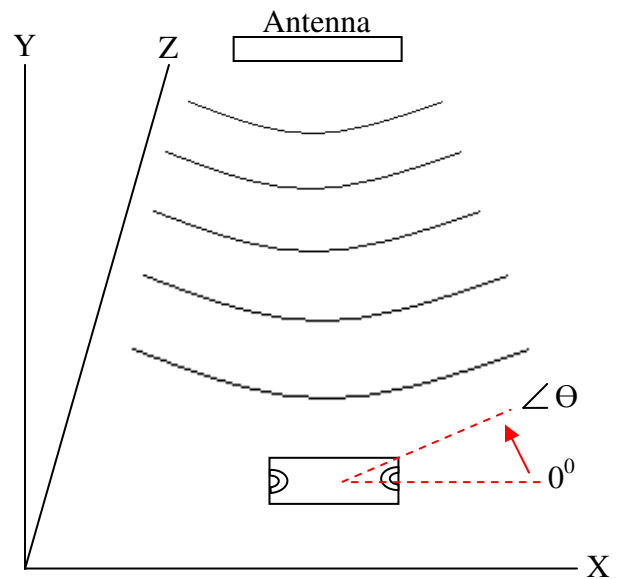
## Angular Sensitivity

### 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