



## M-King Tag

### FEATURES

- M-King Tag is ATEX approved and thus can be used in potentially explosive atmosphere.
- The 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, 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   | Dia. 62mm, thickness 10mm                          |
|                              | Material  | ABS  |
|                              | Colour  | Blue   |
|                              | Weight  | 25 gm.   |
| <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>          | 309V3-Ex  |  |
| <b>Atex Marking details:</b> | II 1 G, Ex ia IIC T5 Ga                                 |  |
| <b>Options:</b>              | Available with:   |  |
|                              | Other IC type on request                                |  |
|                              | Other plastic material and colours                      |  |
|                              | Adhesive backing for easy mounting (indoor application) |  |



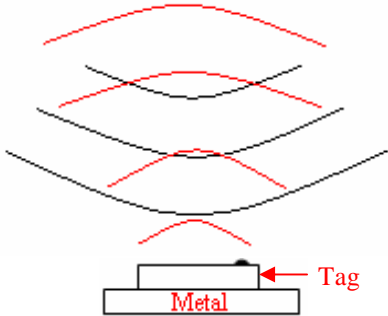
Tag Placement

- ✚ M-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



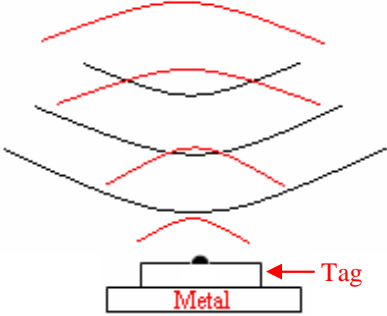
Antenna



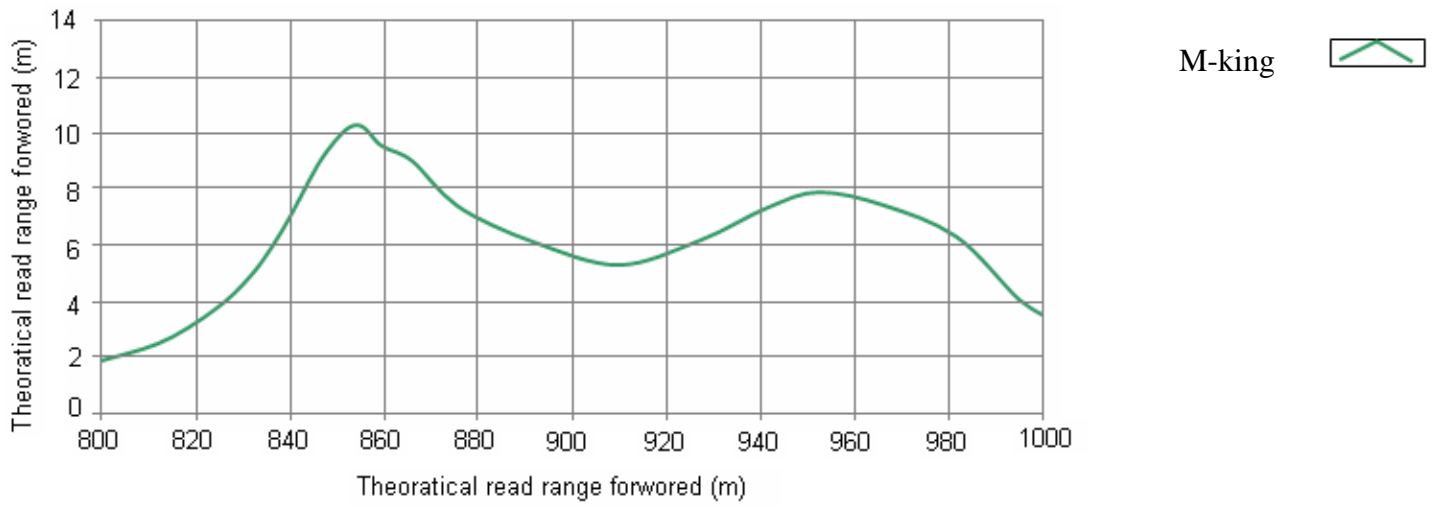
Wrong way



Antenna

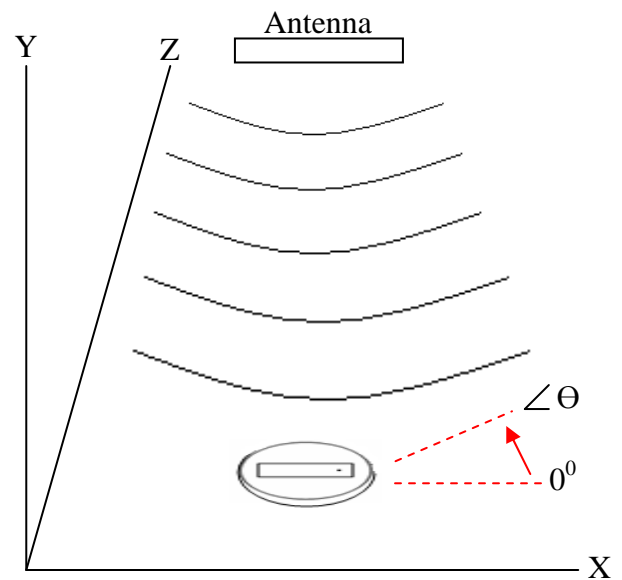
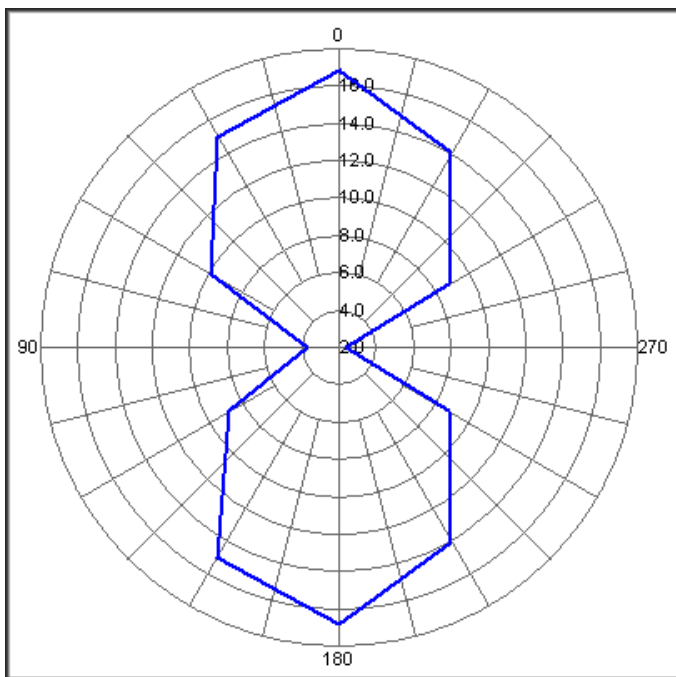


## Frequency v/s Read Range Graph



## Angular Sensitivity

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



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