




M-Nano Tag

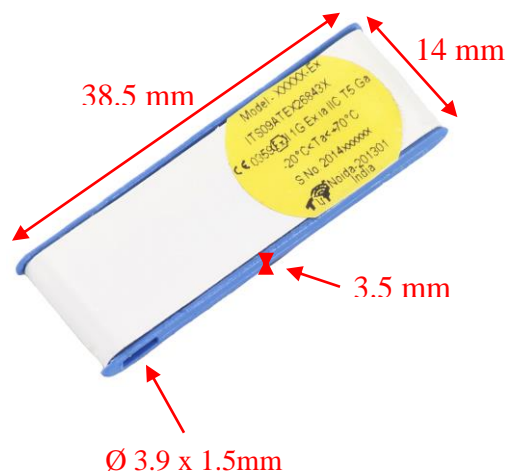
FEATURES

- M-Nano Tag is ATEX approved and thus can be used in potentially explosive atmosphere.
- The tag is very small in size & has very good read range, especially when attached to metal.
- The product has been designed to be easily attached by adhesive.
- Can be used with cable ties through its mounting hole.
- Flexible Read/Write Range (reader dependant).

APPLICATIONS

- Used in IT asset tracking applications such as backup tapes, servers, hard drives, and media tapes without any human intervention.
- Inventory control of small tools and manufacturing equipment, servers, and network routers.

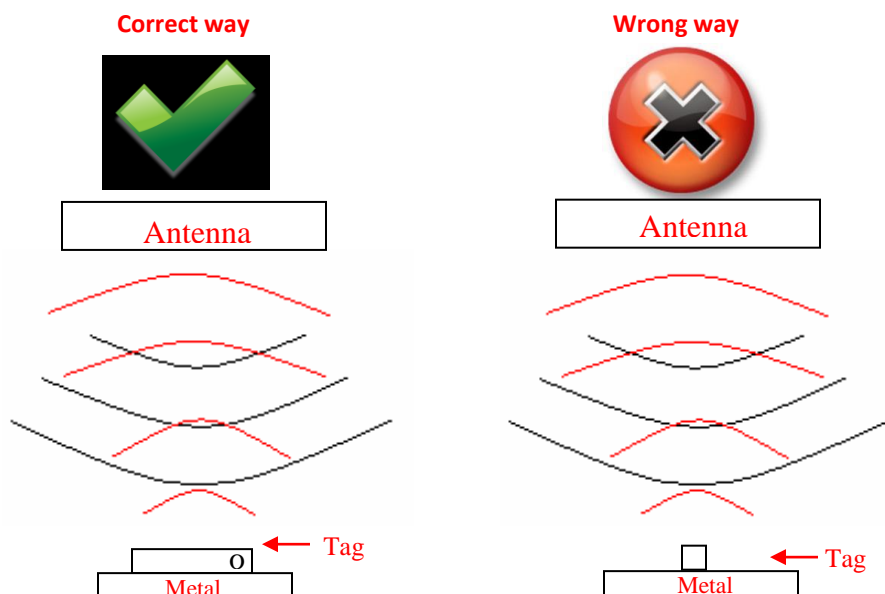
| | | |
|------------------------------|---|--|
| Chip Type: | Alien Higgs 9, GS1 Class 1 Gen 2 | |
| | EPC Memory: Up to 496-EPC Bits (nominally 96 bits) | |
| | User Memory: Up to 688 Bits | |
| | Data Retention: 50 Years | |
| | Write Endurance: 200,000 Cycles | |
| Mechanical: | Dimension | 38.5 x 14 x 3.5 mm |
| | Face Material | Polyester |
| | Colour | Blue & white |
| | Weight | 2 g |
| Electrical: | Operating Frequency | 865-868MHz, (902-928MHz also available on request) |
| | Operating mode | Passive (battery-less transponder) |
| Ingress Protection: | IP54 | |
| Thermal: | Storage Temp. | -20°C to +70°C |
| | Operating Temp. | -20°C to +70°C |
| Part Number: | 319V1-Ex01 | |
| Atex Marking details: |  II 1 G, Ex ia IIC T5 Ga | |
| Options: | Available with: | |
| | Other IC type and Frequency on request | |
| | Other colour combination & material | |
| | Adhesive backing / hanging thread for easy mounting | |
| | | Non-metallic 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

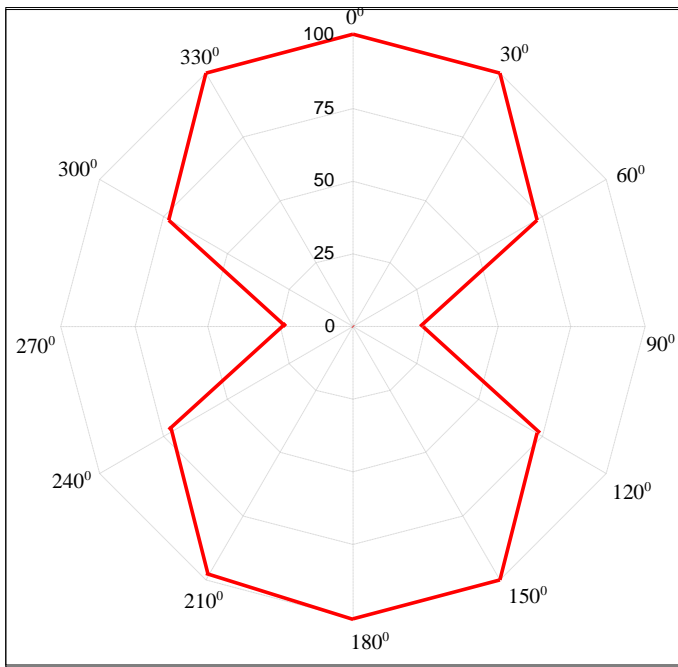
- ✚ M-Nano is polarized perpendicular to TTF logo.
- ✚ Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- ✚ Ensure that there is no hindrance between the tag and the reader antenna.
- ✚ Reader antenna should be parallel to the length of tag as shown in below figure:



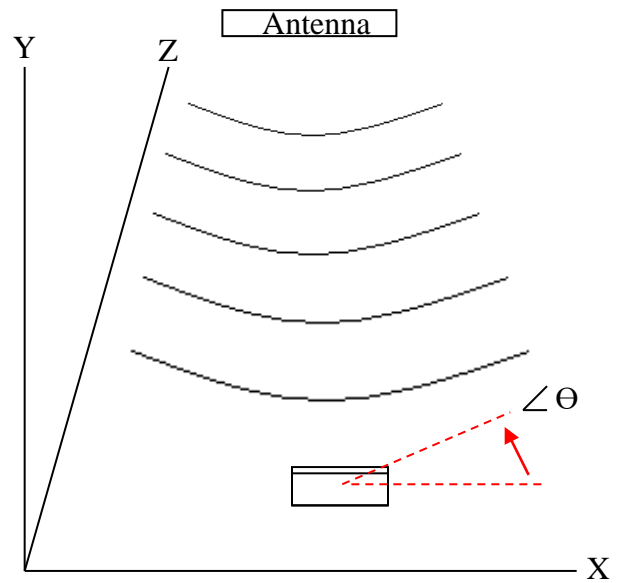
- ✚ Tag can be attached through adhesive tape or can be hanged through nylon thread.

M-Nano 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