

Data Sheet



M-Nano Tag

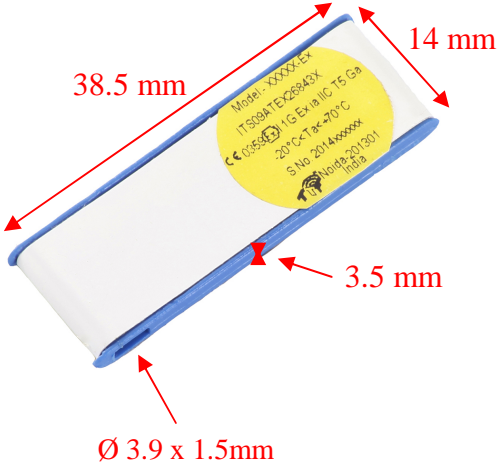
FEATURES

- 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 3 EPC Class 1 Gen 2	
	EPC 96 bit extendable up to 480 bits	
	User Memory 512 bit	
	Data retention of 50 years	
	Write endurance 100.000 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-Ex	
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		



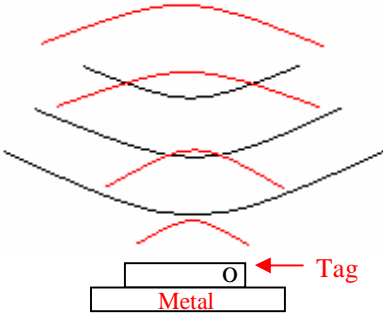
Tag Placement

- ✚ 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:

Correct way



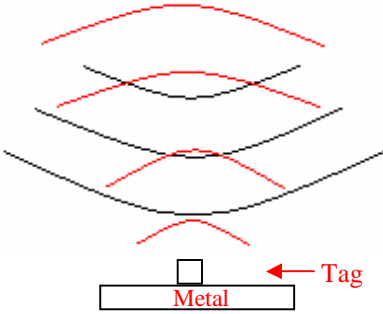
Antenna



Wrong way

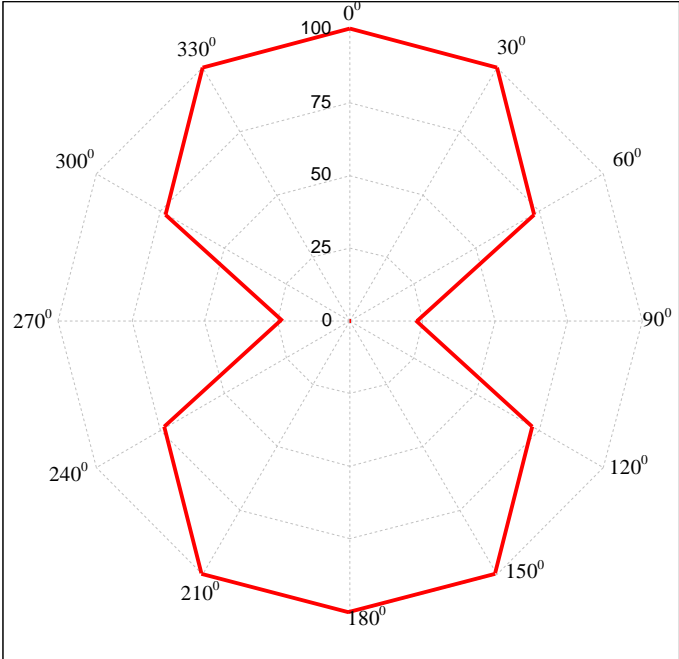


Antenna

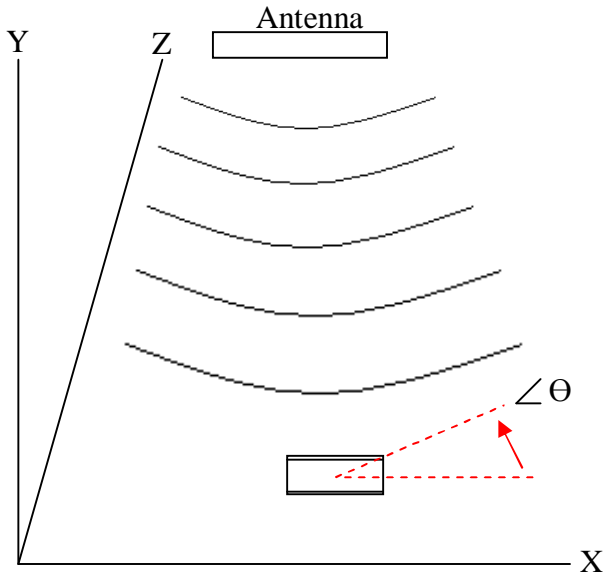


- ✚ Tag can be attached through adhesive tape or can be hanged through nylon thread.

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