



With very small form factor this On-Metal and PCB based RAIN (UHF) RFID Tag is a perfect solution when application area is limited, especially for tools and other small items like hospital assets. It is also capable of withstanding high temperatures.

PHYSICAL SPECIFICATION

Tag Material	FR4 (PCB)
Tag Dimensions	18x6mm, (Hole: D2mmx1), T 3.0mm without IC bump, 4.0mm with IC bump 0.708x0.236in, (Hole: D0.078inx1), T 0.118in without IC bump, 0.157in with IC bump
Mounting Method	Screw
Weight	1.2 gms
Delivery Format	Single Pieces

RF SPECIFICATION

Mode of Operation	Passive
Device Type	Plastic Hard Tag
Air Interface Protocol	EPC Class1 Gen2, ISO18000-6C
Operational Frequency	ETSI: 865-868MHz FCC: 902-928MHz
IC Type	Alien Higgs 3
Memory Configuration	EPC 96bits (Up to 480bits) , USER 512bits, TID64bits
Write Cycle Endurance	100,000
Data Retention	Upto 50 years
Applicable Surface Materials	Metallic surfaces
Read Range (Fixed Reader)	ETSI : On metal upto 3 m FCC : On metal upto 4 m

ENVIRONMENTAL RESISTANCE

Operating Temperature	-40°C to +100°C / -40°F to +212°F
Withstands Exposure To	-40°C to +150°C / -40°F to 302°F
Peak Temperature	+150°C / +302°F
Recommended Application Temperature	+10°C to +38°C / 50°F to +100.4°F
Water Resistance (IP Rating)	IP68
Ideal Storage Condition	-40°C to +150°C / -40°F to 302°F
Expected Lifetime	Years in normal operating conditions

PRODUCT INSTALLATION



The tag can be attached to the surface using the following fixing methods

- **Mechanical Fixing:**
Achieved by using a screw and is a recommended for environments that involve high mechanical stress.
During fixing make sure there is no air gap left in between the metal surface and tag.

PERSONALIZATION OPTIONS

Pre-encoding

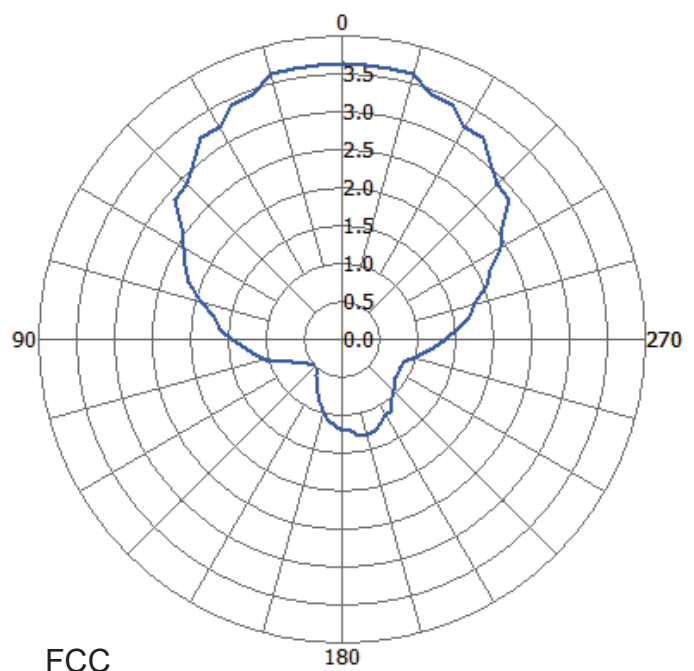
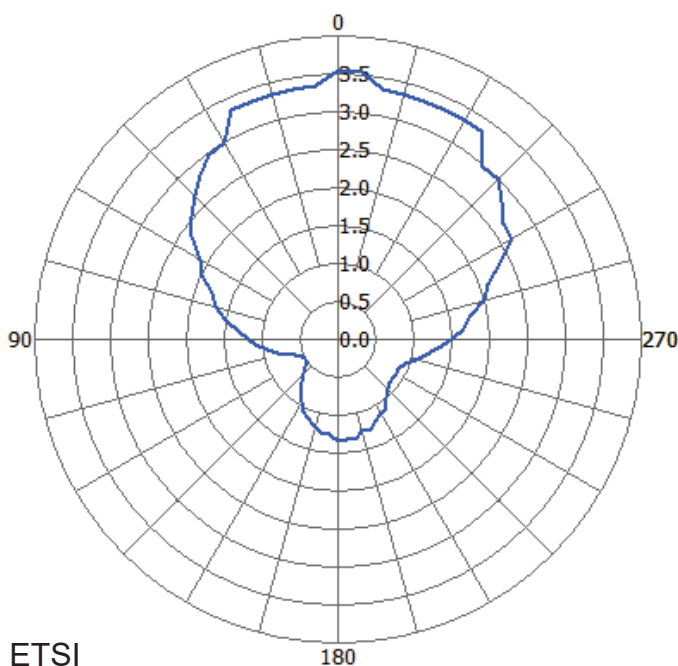
- Customer specific encoding of EPC

ORDER INFORMATION

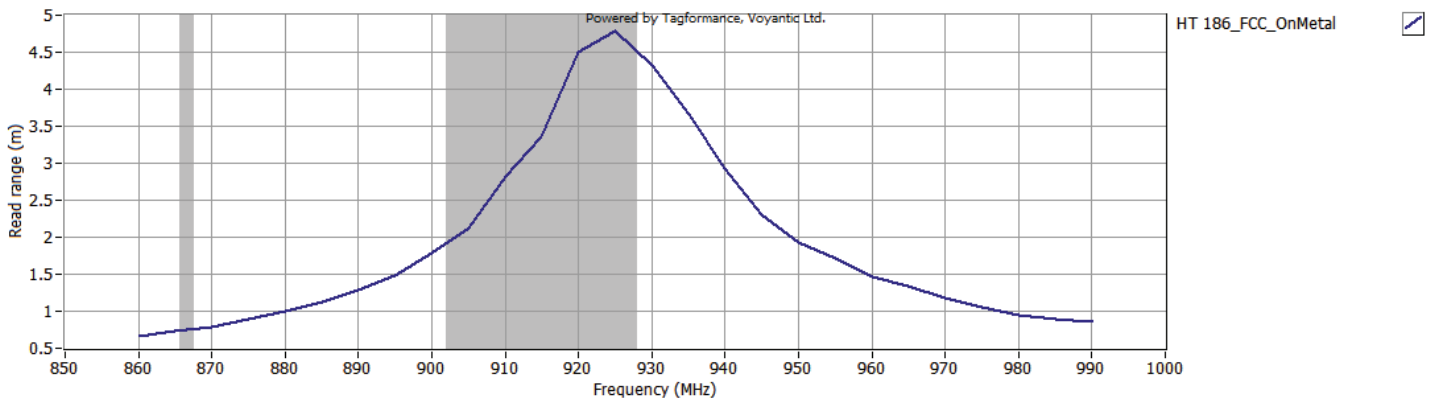
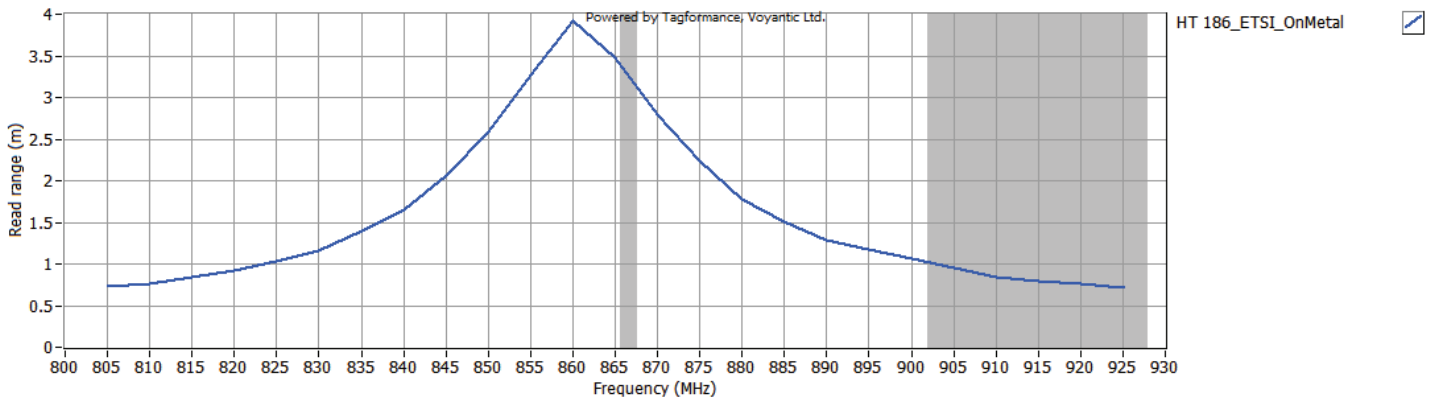
Part Number

- RF.HT.186.ETSI.H3
- RF.HT.186.FCC.H3

RADIATION PATTERN (ETSI & FCC)



READ RANGE GRAPH (ETSI & FCC)



** The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.



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