

Theta Inlay



Xerafy Theta is a flexible RFID inlay designed with injection molding in mind.

Operating at global frequencies, it is thin and flexible, and survives temperatures of up to 230°C, making it the ideal solution for RFID at point-of-manufacturing.



Global frequency



Hi-Temp resistant



Flexible and embeddable



Long read range off metal



Cost effective



- Plastics Injection Molding Processes
- Returnable Transport Items
- Automotive Components
- Hand Tools and Equipment
- Portable Power Equipment and Cables

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Performance Characteristics

Read range ¹ (Handheld)	Up to 16 ft (5 m)
Read range ¹ (Fixed)	Up to 29.5 ft (9 m)
Polarization	Linear
Mounting system	Injection molding

1. Off metal

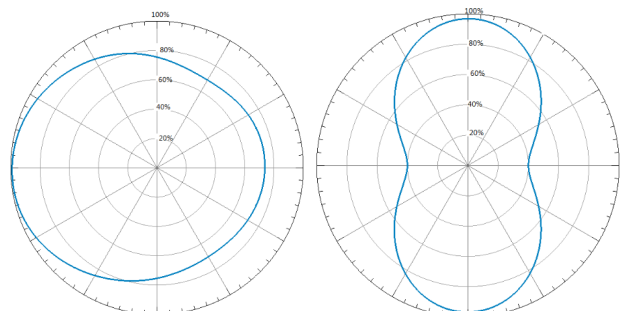
Functional Specification

RF protocol	EPC global Class 1 Gen2
Frequency	902-928 , 865-868 MHz (Global)
IC type (chip) ¹	Alien Higgs-3
Memory	96-bit EPC, 512-bit user memory, 64-bit serialized TID
Material	FPC
Format	Dry inlay

1. The chip data retention is up to 50 years, based on chip operating under general environment conditions.

Radiation Pattern

Off metal Horizontal / Vertical



Environmental Specification

Operational temperature	-40°C to +100°C
Survival temperature	-40°C to +230°C (24 hours)
Compression	980 Kpa
Shock (drop)	3 ft (1 m) to concrete/granite
Vibration	MIL-STD-810G
IP rating	IP 68

1. The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.

Industry Compliance

RoHS	EU Directive 2011/65/EU
CE	Yes
ATEX/IECEX	Compliant
Warranty	1 year

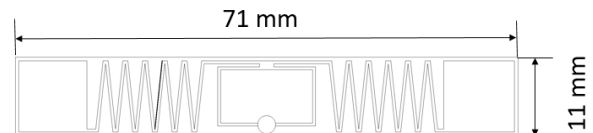
Order Information

X7101-GL100-H3	Theta Inlay
Optional service	encoding



Product Dimensions and Weight

Dimensions (in)	2.8 x 0.43 x 0.005
Tolerance	+/- 0.02
Dimensions (mm)	71 x 11 x 0.13
Tolerance	+/- 0.5
Weight	0.2g



Installation Instructions

Designed to work with a wide range of thermoplastic resins and to be compatible with a large number of injection molding processes.

About Xerafy

Xerafy designs and manufactures the world's toughest RFID tags to power Industrial IoT applications in Aerospace, Oil & Gas, Automotive, Healthcare and Manufacturing.

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