

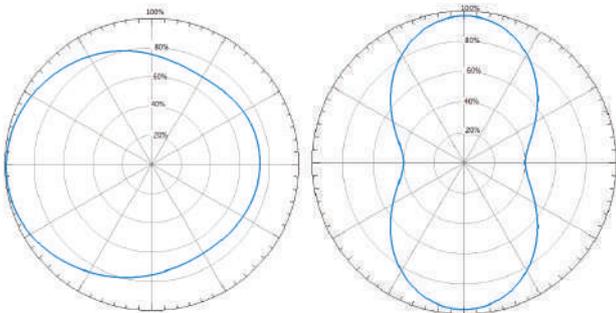


# THETA INLAY

## Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 860-960 MHz (Global)
- **IC type (chip)**<sup>1</sup> Alien Higgs 3
- **Chip memory** 96/480 bits EPC; 96 bits TID; 512 bits user memory
- **Read range fixed**<sup>2</sup> Up to 29.53 ft (9 m)
- **Read range handheld**<sup>2</sup> Up to 16.40 ft (5 m)
- **Polarization** Linear
- **Radiation pattern off metal**

Off metal-Horizontal / Vertical



## Key Features

- + **Flexible and embeddable**
- + **230°C:** withstand high temperatures
- + **9 m read range:** read from a distance
- + **Cost effective:** for high volume
- + **IP68 rating:** waterproof

## Applications

- **Plastics injection molding processes**
- **Returnable transport items**
- **Automotive components**
- **Portable power equipment and cables**

## Environmental Specifications

### Temperatures



- **Operational** -40°C to +100°C  
-40°F to +212°F
- **Survival** -40°C to +230°C (24 hours)  
-40°F to +446°F

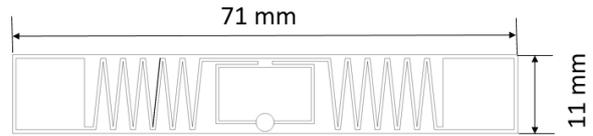
- **IP rating** IP68
- **Compression strength** 142 psi (980 kPa)
- **Shock** 3ft (1 m) to concrete/granite
- **Vibration** MIL-STD-810G
- **Warranty** 1 year

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

<sup>2</sup> Off metal

## Physical Specifications

- **Material** FPC
- **Format** Dry inlay
- **Dimensions (in)**<sup>1</sup> 2.80 x 0.43 x 0.005
- **Dimensions (mm)**<sup>1</sup> 71 x 11 x 0.13
- **Weight** 0.20 g



## Mounting Systems

- Injection molding, Embedded

## Installation Instructions

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

<sup>1</sup>Tolerance: +/- 0.02; +/- 0.50

## Industry Compliance



## Order Information

Theta Inlay: X7101-GL100-H3

## Customization Options

Encoding

ATEX Certified Version

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