

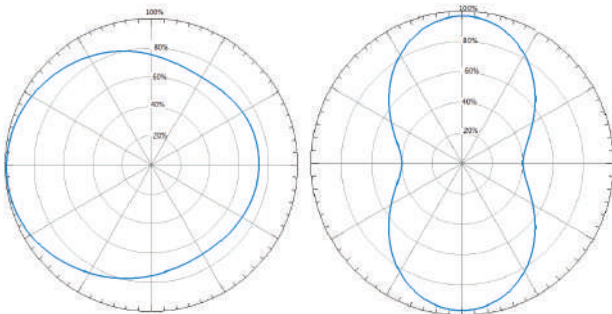


THETA INLAY

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 860-960 MHz (Global)
- **IC type** (chip)¹ Alien Higgs 3
- **Chip memory** 96 bits EPC; 96 bits TID; 512 bits user memory
- **Read range** fixed² Up to 29.53 ft (9 m)
- **Read range** handheld² 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
- **Survival** -40°C to +230°C (24 hours)

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

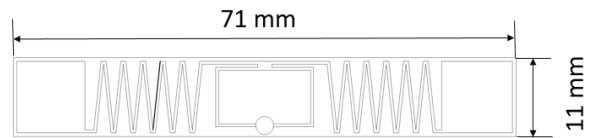
¹ The chip data retention is up to 50 years, based on chip operating under general environment conditions.

² Off metal



Physical Specifications

- **Material** FPC
- **Format** Dry inlay
- **Dimensions (in)**¹ 2.80 x 0.43 x 0.005
- **Dimensions (mm)**¹ 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.

¹ Tolerance: +/- 0.02; +/- 0.50

Industry Compliance



Order Information

Theta Inlay: X7101-GL100-H3

Customization Options

Encoding

ATEX Certified Version

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