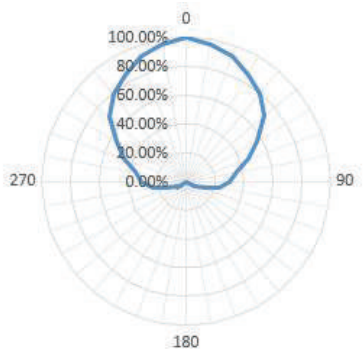
XS WEDGE

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US); 865-868 MHz (EU)
- **IC type (chip)**[1] Alien Higgs 9
- **Chip memory** 96 bits EPC, 48 bits TID, 688 bits user memory
- **Read range fixed**[2] Up to 3.28 ft (1 m) US; Up to 2.62 ft (0.80 m) EU
- **Read range handheld**[2] Up to 1.64 ft (0.50 m) US; Up to 1.31 ft (0.40 m) EU
- **Polarization** Linear
- **Radiation pattern in metal**



Key Features

+ **Embeddable:** embedded in metal
+ **250°C:** withstand high temperatures
+ **Small form factor:** fits small asset
+ **Injection molded case:** resistant to liquids, pressure and corrosion

Applications

- **Onshore and offshore pipes**
- **Heavy equipment and tools**
- **Automotive manufacturing**
- **Industrial molds**

Environmental Specifications

Temperatures

- Operational -40°C to +85°C
- Survival -50°C to +220°C (168 hours)
- Peak 250°C (2 hours)

Chemicals[3]

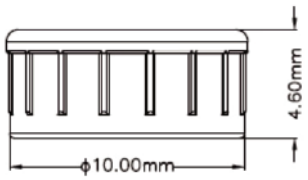
- 24h H_2SO_4 (10% sulfuric acid)
- 24h HNO_3 (10% nitric acid)
- 24h H_3PO_4 (20% phosphoric acid)
- 24h H_2O_2 (25% hydrogen peroxide)
- 24h NaOH (10% sodium hydroxide)

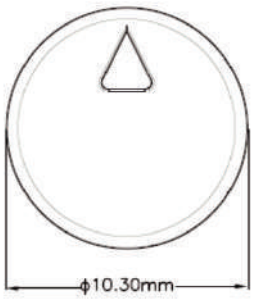
- **IP rating** IP68
- **Compression strength** 10,100 psi (70 MPa)
- **Weatherability** UV resistance, sea water
- **Warranty** 1 year

[1] The chip data retention is up to 50 years, based on chip operating under general environment conditions.
[2] Embedded in metal read range (2W EPR).
[3] The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.

Physical Specifications

- **Material** Industry grade polymer
- **Dimensions (in)**[1] ø 0.41 x 0.18
- **Dimensions (mm)**[1] ø 10.30x 4.60
- **Weight** 0.28 oz (8 g)





Mounting Systems

· Press fit, embedded

Installation Instructions

1. Preparation - For a spherical or curved surface, first use a milling machine to make a plane on the surface (Length ≥12 mm * Width ≥ 12 mm).
2. Drilling - Make a flat bottom groove on the metal surface (10 mm * 4.60 mm).
3. Position - Put ⅓ of the XS Wedge into the groove and adjust the tag's direction according to the object size. The ▵ mark on the tag indicates the recommended installation direction to ensure the tag's polarization direction is parallel with the length of the metal asset. Read range performance will decrease when the polarization direction forms an angle with the length direction.
4. Insertion - Drive the remaining ⅔ of the tag into the groove, using a rubber hammer or similar tool.

[1] Tolerance: +/- 0.004; +/- 0.100

Industry Compliance

Order Information

XS Wedge US: X4202-US100-H9	XS Wedge EU: X4202-EU100-H9

Customization Options

Encoding	Laser Marking
ATEX Certified Version	