XPLORER SURFACE
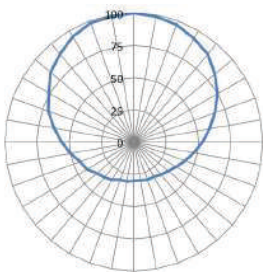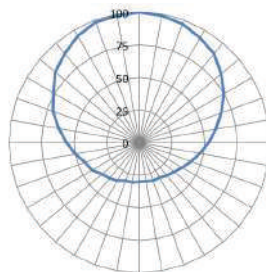
Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US); 865-868 MHz (EU)
- **IC type** (chip)[1] Alien Higgs 3
- **Chip memory** 96 bits EPC; 64 bits unique TID; 512 bits user memory
- **Read range** fixed[2] Up to 4.92 ft (1.50 m)
- **Read range** handheld[2] Up to 3.28 ft (1 m)
- **Polarization** Linear
- **Radiation pattern**

Horizontal   Vertical

Key Features

+ **Embeddable:** snap in metal

+ **250°C:** withstand high temperatures

+ **Stainless steel case:** withstand high pressures, compression, chemicals

+ **IP69K rating:** waterproof

Applications

- **Yard management for Oil and Gas pipes**

- **Pipe maintenance**

- **Heavy equipment in mining**

- **Building sites in construction**

- **High-Pressure ovens in manufacturing**

Environmental Specifications

Temperatures
- Operational -40°C to +85°C
- Survival -50°C to +250°C

Chemicals[3]
- Withstand drilling fluids and hydraulic fluids including hydrogen sulphide.

- **IP rating** IP68, IP69K
- **Compression strength** < 13,000 psi (89 MPa)
- **Shock** 3 ft (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] Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power.
[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** Stainless steel 316L, High performance engineered polymer
- **Dimensions (in)[1]** ⌀ 1.11 x 0.33
- **Dimensions (mm)[1]** ⌀ 28.30 x 8.50
- **Weight** 0.89 oz (25.40 g)

Mounting Systems

· Snap in, embedded

Installation Instructions

1. Drill a hole in the asset surface. The hole size should be carefully controlled in ⌀ 28.30 mm ± 0.05 × 6.50 mm ± 0.10 mm. Suggest to use the drill bit with 28 mm diameter.

2. Put the tag in the hole with right orientation. The arrow mark needs to face towards the longer free metal surface side to get optimal read range performance.

3. Put a punch pin on the tag and hold the pin horizontally.

4. Hammer the punch pin and drive the tag into the hole.
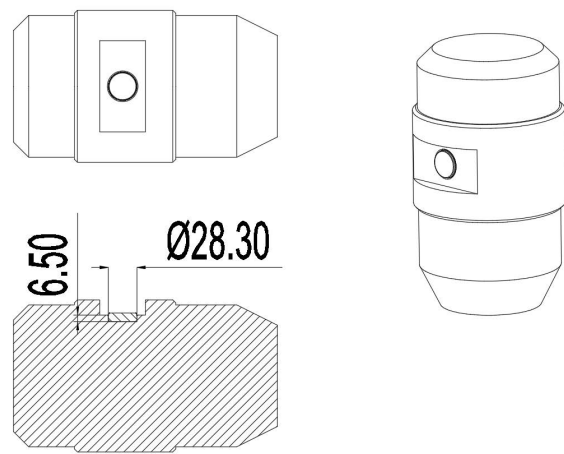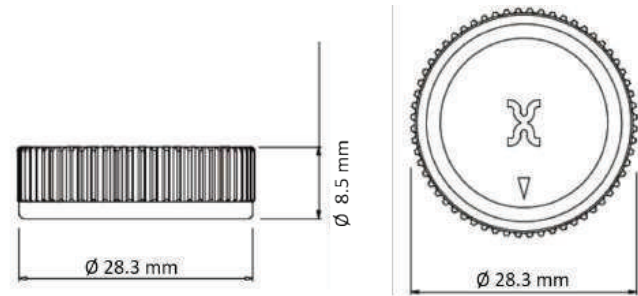
[1] Tolerance: +/- 0.004; +/- 0.100

Industry Compliance

Order Information

Xplorer Surface US: X1115-US111-H3	Xplorer Surface EU: X1115-EU111-H3

Customization Options

Encoding	Printing
Laser Marking	ATEX Certified Version