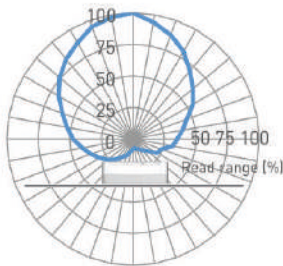




XENSE TEMP

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US); 865-868 MHz (EU)
- **IC type (chip)**¹ Asygn AS3211
- **Chip memory**² 192 bits EPC; 48 bits TID; 32 bits user memory
- **Customizable sensing features**
Temperature; humidity; strain; ambient light; pressure; magnetic field (hall effect); electrical continuity
- **Read range off metal**³ Up to 9.84 ft (3 m)
- **Read range on metal**³ Up to 6.56 ft (2 m)
- **In concrete**³ Up to 14.76 ft (4.50 m)
- **Polarization** Linear
- **Radiation pattern on metal**



Key Features

- + **Wireless:** battery-free
- + **Temperature sensing:** monitor temperatures
- + **Embeddable:** for concrete
- + **IP68 rating:** waterproof
- + **Industry grade mounting systems**

Applications

- Concrete curing
- Infrastructure monitoring
- Manufacturing assets

Environmental Specifications

Temperatures



- Operational -40°C to +85°C
- Survival -40°C to +85°C

- **IP rating** IP68
- **Compression strength** 29 psi (200 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.

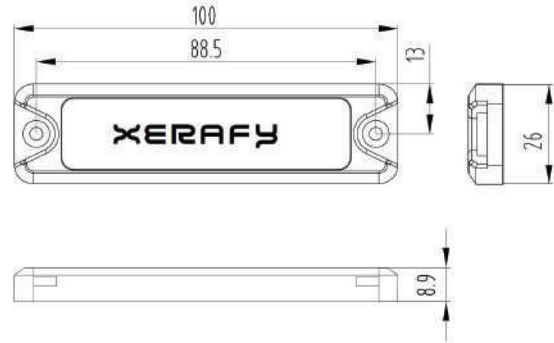
² EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.

³ Fixed reader



Physical Specifications

- **Material** Industry grade polymer, Copper
- **Dimensions (in)**¹ 3.94 x 1.02 x 0.35
- **Dimensions (mm)**¹ 100 x 26 x 8.90
- **Rivet hole diameter** 0.137 in +/-0.008 (3.50 mm +/-0.20)
- **Weight** 0.68 oz (19.40 g)

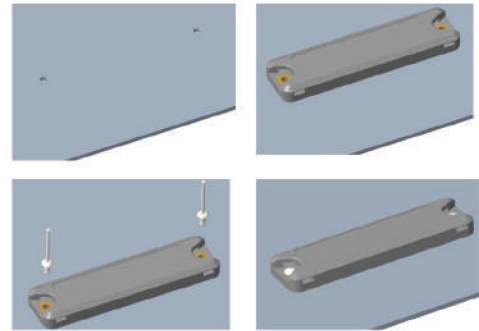


Mounting Systems

- Casting
- Pop rivets
- Screws
- Cable ties
- Industrial adhesive (optional)

Installation Instructions

1. Use M4 rivets for attachment:
 - Drill two holes (∅ 4) in the metal surface, pitch: 88.50 mm.
 - Utilize M4 rivets in conjunction with a rivet gun to securely fasten the tag onto the metal surface.
2. Use M4 screws for attachment:
 - Drill two holes (∅ 3.20) in the metal surface, pitch: 88.50 mm.
 - Perform a M4 thread tapping procedure.
 - Utilize M4 screws to securely attach the tag to the metal surface.



¹Tolerance: +/- 0.02; +/- 0.50

Industry Compliance



Order Information

XENSE Temp Concrete US: X90A0-US100-AS3211

XENSE Temp Concrete EU: X90A0-EU100-AS3211

Customization Options

Encoding

Laser Marking

ATEX Certified Version

Printing

Industrial Adhesives

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