

Dot XS-Autoclavable Version



Functional Specifications

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| RF air protocol | EPC Global Class1Gen 2; ISO18000-6C |
| Operational frequency | UHF 902-928 MHz (US); 866-868 MHz (EU) |
| IC type | Alien Higgs-3 |
| Memory configuration | 96-EPC bits; 512-bit user memory |
| Functionality | Read / write (user programmed) |
| Memory – expected read / write cycles | 100,000 cycles at 77°F (25°C) |
| Data retention | Up to 50 years ¹ |
| Warranty (limited) | 1 year |
| Material | Ceramic |
| Color | Black ³ |
| Weight | 0.012 oz (0.34 g) |

Performance Characteristics

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| Read range on metal (2W ERP) ² | Up to 5 ft (1.5 m) |
| Polarization | Linear |

¹ The chip data retention is based on chip operating under general environment conditions.

² Actual read range may vary based upon use case and attachment methods.

³ To prevent adverse reaction with glue during autoclave, delivered tags that use a glue attachment method on the instruments will not be coated with an external layer of paint. To ensure the best results for the solution, it is advisable to use the glue provided by Xerafy.



Environmental and Industry Compliance

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| Compression strength | Packaging dependent |
| IP classification | IP68 |
| Standard compliancy | RoHS (EU Directive 2011/65/EU) , CE (EU version) |
| Operational temperature (MIL STD 810-F) | -40°F to +185°F (-40°C to +85°C) |
| Application temperature (MIL STD 810-F) | -40°F to +302°F (-40°C to +150°C) |
| Humidity | |
| Operational humidity | 5%-95% non-condensing |
| Storage humidity | 5%-95% non-condensing |

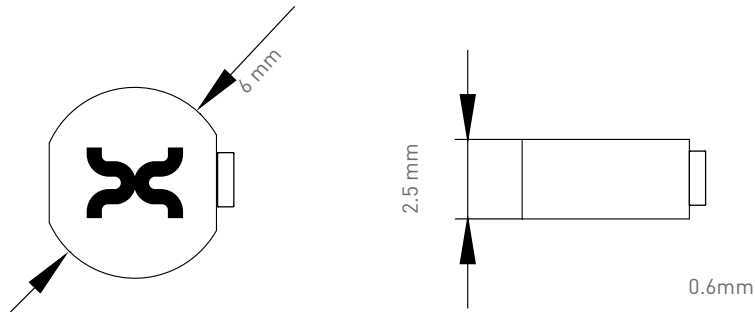
Cleaning and Disinfection Process (ANSI/AAMI ST79)

| | |
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| Chemical sterilization for decontamination Liquid chemical sterilants include glutaraldehyde, hydrogen peroxide, hydrogen peroxide-peracetic acid combinations, sodium hypochlorite, and peracetic acid. | Pass |
| Thermal (hot water) disinfection <ul style="list-style-type: none"> Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying. Pasteurization equipment provides cleaning and high-level disinfection at water temperatures of 65°C to 77°C (150°F to 170°F) for a contact time of at least 30 minutes. Washer-disinfectors provide a cycle of cleaning, rinsing, disinfection, and drying at temperatures that are usually higher than those of washer-sanitizers | Pass |
| Thermal sterilization for decontamination Saturated steam can be used to decontaminate devices capable of withstanding high temperatures (121°C to 135°C [250°F to 275°F]) and pressures (16 to 35 psig). Washer-sterilizers provide cleaning and rinsing followed by exposure to saturated steam at temperatures of 121°C to 135°C (250°F to 275°F). | Pass |
| Ultrasonic cleaner 3KHz for 30 min | Pass |
| Disinfection by light C wave ultraviolet and wavelength range is from 200nm to 275nm | Pass |
| Detergent enzyme cleaner | Pass |
| Autoclave sterilization 134 °C and 0.6 Mpa for more than 1000 cycles | Pass |

Application and Installation

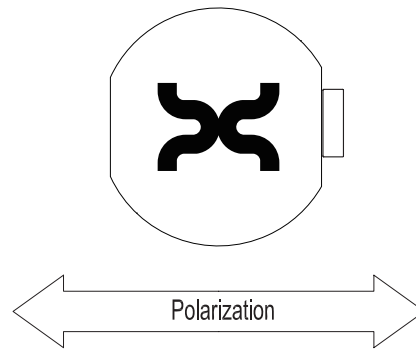
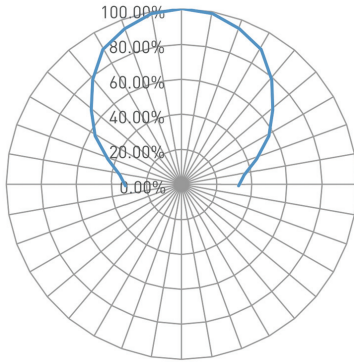
| | |
|--------------------|--|
| Application | Surgical instruments |
| Applicable surface | Metal |
| Mounting methods | Glue |
| Glue | Autoclavable , meets USP Class VI and ISO 10993-5 cytotoxicity requirement |

Product Dimensions



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|-----------------|--------------|
| Dimensions (mm) | ∅ 6 x 2.5 |
| tolerance | +/- 0.2 |
| Dimensions (in) | ∅ 0.24 x 0.1 |
| tolerance | +/- 0.008 |

Radiation Pattern and Polarization



Order information

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|----------------|------------------------------------|
| X4102-US040-H3 | Autoclavable Dot XS US (Painted) |
| X4102-EU040-H3 | Autoclavable Dot XS EU (Painted) |
| X4102-US080-H3 | Autoclavable Dot XS US (Unpainted) |
| X4102-EU080-H3 | Autoclavable Dot XS EU (Unpainted) |