

## Dot XS-Autoclavable Version



### Functional Specifications

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 <sup>1</sup>
Warranty (limited)	1 year
Material	Ceramic
Color	Black <sup>3</sup>
Weight	0.012 oz (0.34 g)

### Performance Characteristics

Read range on metal (2W ERP) <sup>2</sup>	Up to 5 ft (1.5 m)
Polarization	Linear

<sup>1</sup> The chip data retention is based on chip operating under general environment conditions.

<sup>2</sup> Actual read range may vary based upon use case and attachment methods.

<sup>3</sup> 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

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

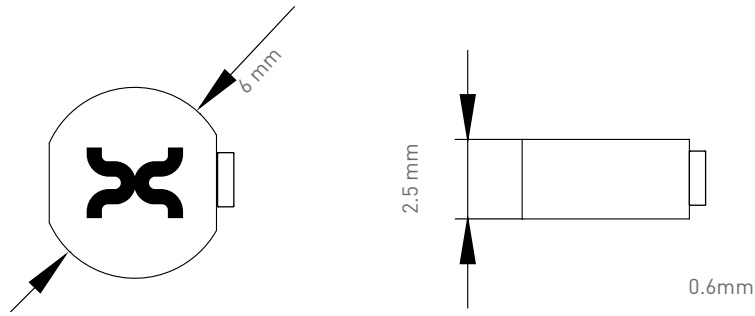
## Cleaning and Disinfection Process (ANSI/AAMI ST79)

<b>Chemical sterilization for decontamination</b> Liquid chemical sterilants include glutaraldehyde, hydrogen peroxide, hydrogen peroxide-peracetic acid combinations, sodium hypochlorite, and peracetic acid.	Pass
<b>Thermal (hot water) disinfection</b> <ul style="list-style-type: none"> <li>Washer-sanitizers, washer-decontaminators, utensil washers, and cart washers reduce microbial contamination by means of cleaning agents, hot water, rinsing, and drying.</li> <li>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.</li> <li>Washer-disinfectors provide a cycle of cleaning, rinsing, disinfection, and drying at temperatures that are usually higher than those of washer-sanitizers</li> </ul>	Pass
<b>Thermal sterilization for decontamination</b> 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
<b>Ultrasonic cleaner</b> 3KHz for 30 min	Pass
<b>Disinfection by light</b> C wave ultraviolet and wavelength range is from 200nm to 275nm	Pass
<b>Detergent enzyme cleaner</b>	Pass
<b>Autoclave sterilization</b> 134 °C and 0.6 Mpa for more than 1000 cycles	Pass

## Application and Installation

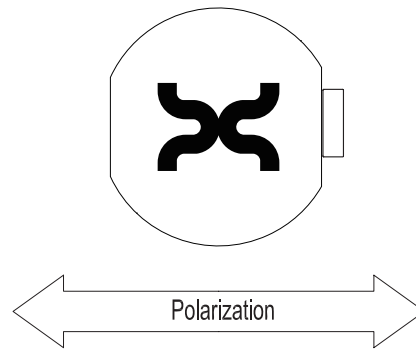
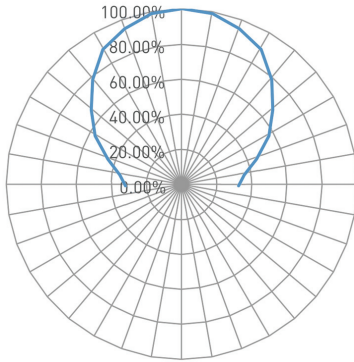
Application	Surgical instruments
Applicable surface	Metal
Mounting methods	Glue
Glue	Autoclavable , meets USP Class VI and ISO 10993-5 cytotoxicity requirement

## Product Dimensions



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

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)