

Dot On XS

STANDARD

HIGH TEMPERATURE

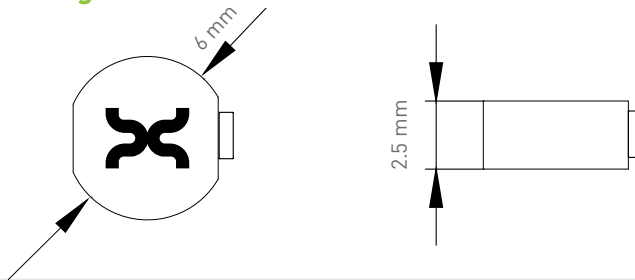
Functional Specifications

| | |
|---------------------------------------|---------------------------------------------|
| RF air protocol | EPC Class 1 Gen 2; ISO18000-6C |
| Operating frequency | UHF 902-928 MHz (US); 866-868 MHz (EU) |
| IC type | Alien Higgs-3 |
| Memory configuration | 96-bit EPC; 512-bit user memory; 64-bit TID |
| 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 |

Environmental and Industry Compliance

| | |
|------------|--------------------------------------|
| RoHS&REACH | EU Directive 2011/65/EU, EC1907/2006 |
| CE | Yes |
| ATEX/IECEX | Certified |

Product Dimensions and Weight



| | |
|-----------------|-------------------|
| Dimensions (mm) | ∅ 6 x 2.5 |
| tolerance | +/- 0.2 |
| Dimensions (in) | ∅ 0.24 x 0.1 |
| tolerance | +/- 0.008 |
| Weight | 0.016 oz (0.44 g) |



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Performance Characteristics

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

Physical Specifications

| | |
|-----------------|------------------------|
| Material | Ceramic |
| Mounting system | Epoxy, injection mould |
| Paint color | Black |
| Logo color | Grey |

Operational and Environmental Specifications

| | |
|-------------------------|-------------------------------------------------|
| Shock (drop) | 3 ft (1 m) to concrete/granite up to 200 cycles |
| Vibration | MIL-STD-810G |
| Compression strength | Packaging dependent |
| IP classification | IP 68 |
| Humidity | |
| Operational humidity | 5%-95% non-condensing |
| Storage humidity | 5%-95% non-condensing |
| Operational temperature | |
| Cold | -40°F (-40°C) |
| Dry heat | +185°F (+85°C) |
| Thermal shock | -22°F to 185°F (-30°C to +85°C); cycled |

STANDARD VERSION

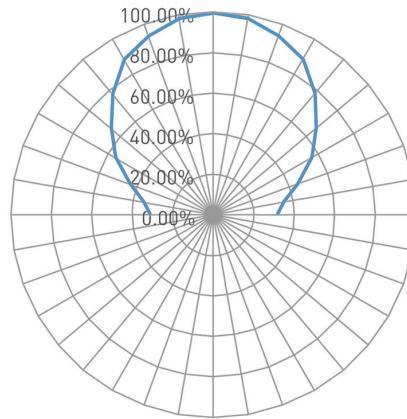
| | |
|----------------------------------|-----------------|
| Application temperature | |
| Cold | -40°F (-40°C) |
| Dry heat (Long term, hours/days) | +302°F (+150°C) |
| Dry heat (Short term, minutes) | +428°F (+220°C) |

HIGH TEMPERATURE VERSION

| | |
|----------------------------------|--------------------------------------|
| Application temperature* | |
| Cold | -40°F (-40°C) |
| Dry heat (Long term, hours/days) | +428°F (+220°C) |
| Dry heat (Short term, hours) | +482°F (+250°C) 6 hours |
| Peak temperature | +716°F (+380°C) less than 10 seconds |

*The tag performance in high temperature application depends on tag mounting method and environmental conditions.

Radiation Pattern



On metal

Order information

| | |
|----------------|------------------------------------|
| X4102-US000-H3 | Dot On US Standard Version |
| X4102-EU000-H3 | Dot On EU Standard Version |
| X4102-US050-H3 | Dot On US High Temperature Version |
| X4102-EU050-H3 | Dot On EU High Temperature Version |

Dot XS

AUTOCLAVABLE

For more information on Dot XS autoclavable version, please download [here](#) or contact us at sales@xerafy.com