

Dot-On XS

P/N: X4102-US000-H3 / X4102-EU000-H3



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-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
Read rate	400 tags per second for 96-EPC bit number
Warranty (limited)	1 year

Performance Characteristics

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

*Actual read range may vary based upon specific application case and antenna power

Physical Specifications

Material	Ceramic
Mounting system	Epoxy
Color	Black

Environmental and Industry Compliance

FDA Class	Class II
Global Unique Device Identification Database (GUDID)	Support
RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant
Autoclavable	Yes

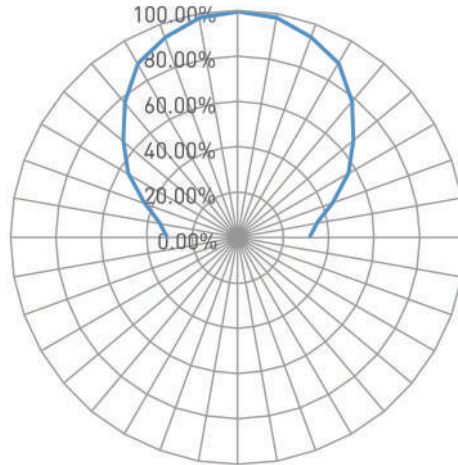


¹ The chip data retention is based on chip operating under general environment conditions.

² Actual read range may vary based upon use case and antenna power.

Radiation Pattern

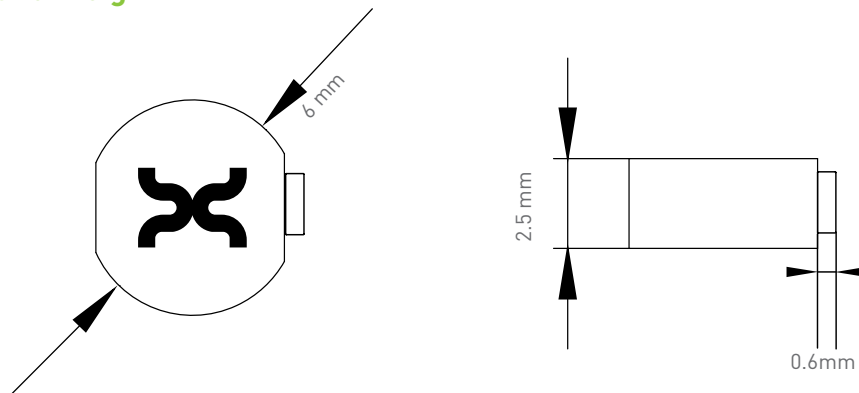
On metal



Operational and Environmental Specifications

Operational temperature	
Cold	-40°F (-40°C)
Dry heat	+185°F (+85°C)
Application temperature	
Cold	-40°F (-40°C)
Dry heat	+302°F (+150°C)
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Shock (drop)	3 ft (1 m) to concrete/granite up to 200 cycles
IP classification	IP68

Product Dimensions and Weight



Dimensions (mm)	ø 6 x 2.5
tolerance	+/- 0.2
Dimensions (in)	ø 0.24 x 0.1
tolerance	+/- 0.008
Weight	0.012 oz (0.34 g)