

Pico-On Plus



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; 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
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 10 ft (3 m)
Polarization	Linear

Physical Specifications

Material	Ceramic
Mounting system	High performance adhesive
Color	Charcoal

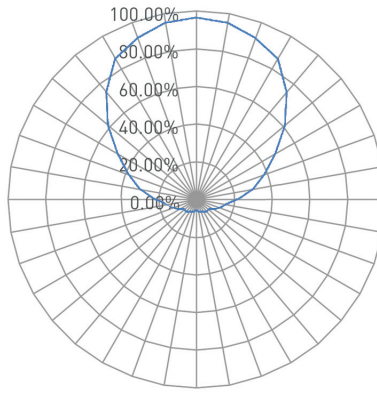
Environmental and Industry Compliance

RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant

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



Operational and Environmental Specifications

Operational temperature

Cold	-22°F (-30°C)
Dry heat (Long term, days/weeks/years)	+185°F (+85°C)
Thermal shock	-22°F to 185°F (-30°C to +85°C); cycled

Application temperature

Cold	-40°F (-40°C)
Dry heat (Short term, minutes/hours)	+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

Vibration

MIL-STD-810F

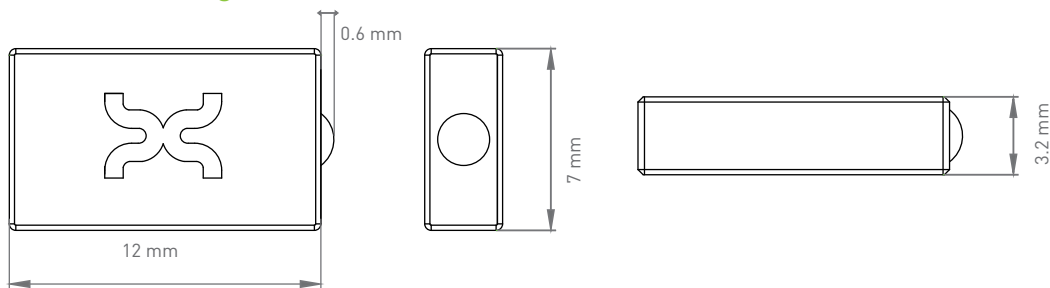
Compression strength

170 psi (1176 kPa)

IP classification

IP68

Product Dimensions and Weight



Dimensions (mm)

12 x 7 x 3.2

tolerance

+/- 0.3

Dimensions (in)

0.47 x 0.28 x 0.13

tolerance

+/- 0.012

Weight

0.05 oz (1.4 g)

Order information

X3110-US001-H3

Pico On Plus US

X3110-EU001-H3

Pico On Plus EU