

Pico-iN 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 in metal (2W ERP) ²	Up to 6.6 ft (2 m)
Polarization	Linear

Physical Specifications

Material	Ceramic
Color	White

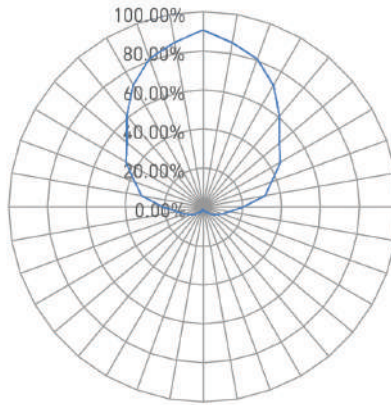
Environmental and Industry Compliance

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.

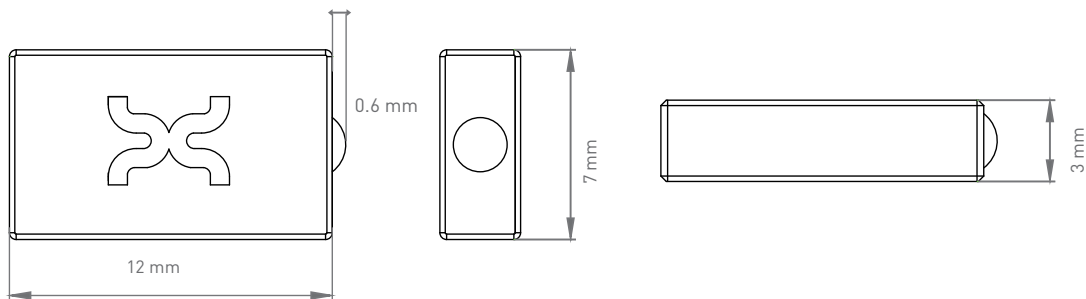
Radiation Pattern



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	Packaging dependent
IP classification	IP 68

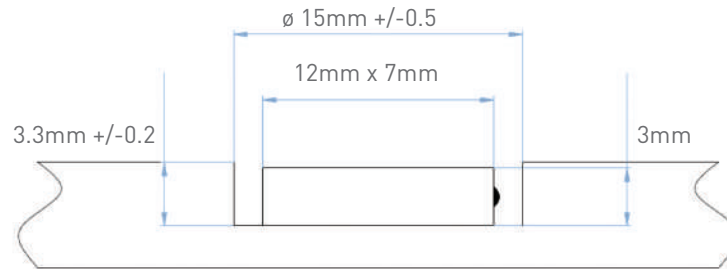
Product Dimensions and Weight



Dimensions (mm)	12 x 7 x 3
tolerance	+/- 0.3
Dimensions (in)	0.47 x 0.28 x 0.12
tolerance	+/- 0.012
Weight	0.05 oz (1.4 g)

Cylindrical Socket Dimensions for Flush-mounting

Cylindrical socket dimensions / tolerance (mm)	15(+/- 0.5) x 3.3 (+/- 0.2)
Cylindrical socket dimensions / tolerance (in)	0.59(+/- 0.02) x 0.13 (+/- 0.008)

**Order information**

X3210-US000-H3	Pico iN Plus US
X3210-EU000-H3	Pico iN Plus EU