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Nano^{X} II

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	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 20 ft (6 m)
Polarization	Linear

Physical Specifications

Material	Engineering-grade nylon polymer
Mounting system	High performance adhesive
Color	Charcoal

Environmental and Industry Compliance

RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant

RoHS 2002/95/EC CE Ex

[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.

For product inquiries: sales@xerafy.com

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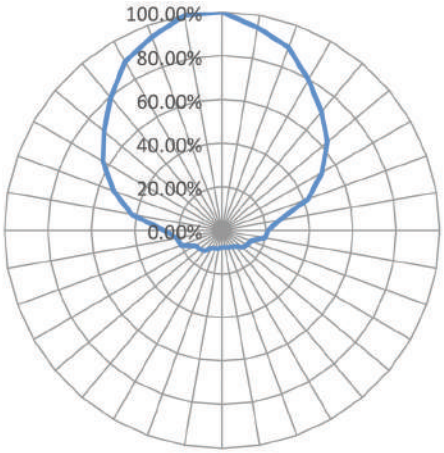
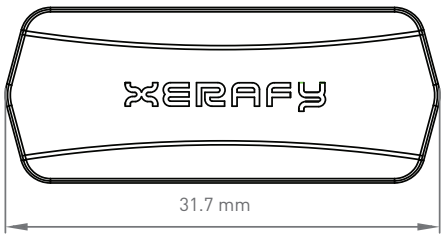
Radiation Pattern

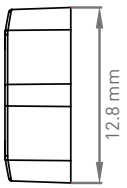


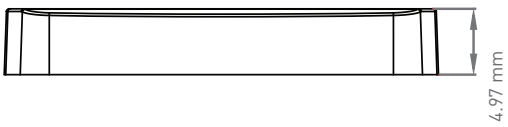
Operational and Environmental Specifications

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	166.8 psi (1150 kPa)
IP classification	IP68

Product Dimensions and Weight







Dimensions (mm)	31.7 x 12.8 x 4.97
tolerance	+/- 0.35
Dimensions (in)	1.25 x 0.51 x 0.20
tolerance	+/- 0.014
Weight	0.18 oz (5 g)

Order information

X1120-US101-H3	Nano XII US
X1120-EU101-H3	Nano XII EU