



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

Performance Characteristics

Read range on metal [2W ERP] ²	Up to 33 ft [10 m]
Polarization	Linear

Physical Specifications

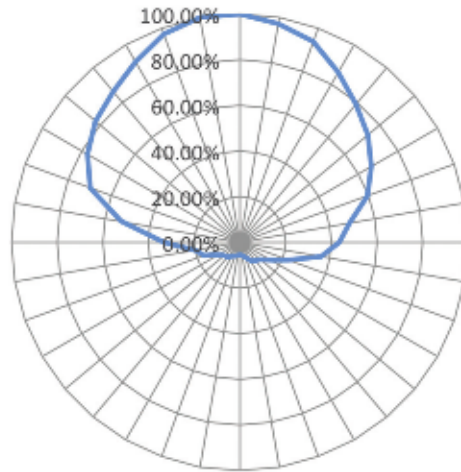
Material	Engineering-grade nylon polymer
Mounting system	<ul style="list-style-type: none">• Screws [Rivet hole, M3]• Pop rivets [Max size 2.4mm]• Adhesive [optional]
Color	Charcoal

Environmental and Industry Compliance

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



Radiation Pattern



Operational and Environmental Specifications

Operational temperature

Cold	-40°F [-40°C]
Dry heat [Long term, days/weeks/years]	+185°F [+85°C]
Thermal shock	-40°F to +185°F [-40°C to +85°C]; cycled

Application temperature

Cold	-40°F [-40°C]
Dry heat [Short term, minutes/hours]	+482°F [+250°C]

Humidity

Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing

Chemical resistance

Isopropyl alcohol	48 hours
Industrial cleaner	48 hours
Epoxy resin coolant	48 hours
Industrial rust lubricant	48 hours
Acetone	48 hours
Salt water [15% salinity]	168 hours
Sodium Hydroxide [10% pH 13]	168 hours
Sulfuric acid [10%, pH 2]	168 hours
Engine oil	168 hours
Gasoline	48 hours
Diesel fuel	48 hours
Soap solution [30%]	48 hours
Carboxylic acids	Testing recommended

Shock [drop]	3 ft [1 m] to concrete/granite up to 200 cycles
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Vibration	MIL-STD-810G
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Compression strength	181 psi [1250 kPa]
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IP classification	IP68
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