



TYPE:RF30-TG-S300

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

Performance Characteristics

Read range on metal, 4W EIRP (2W ERP)*	Up to 33 ft (10 m)
Polarization	Linear
Performance quality	100% tested

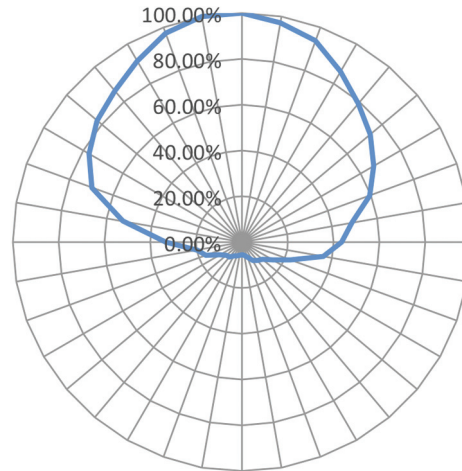
*Actual read range may vary based upon specific application case and antenna power

Physical Specifications

Material	Engineering-grade nylon polymer
Mounting system	Rivet hole, \varnothing 0.12 in (3.2 mm); adhesive (optional)
Color	Charcoal

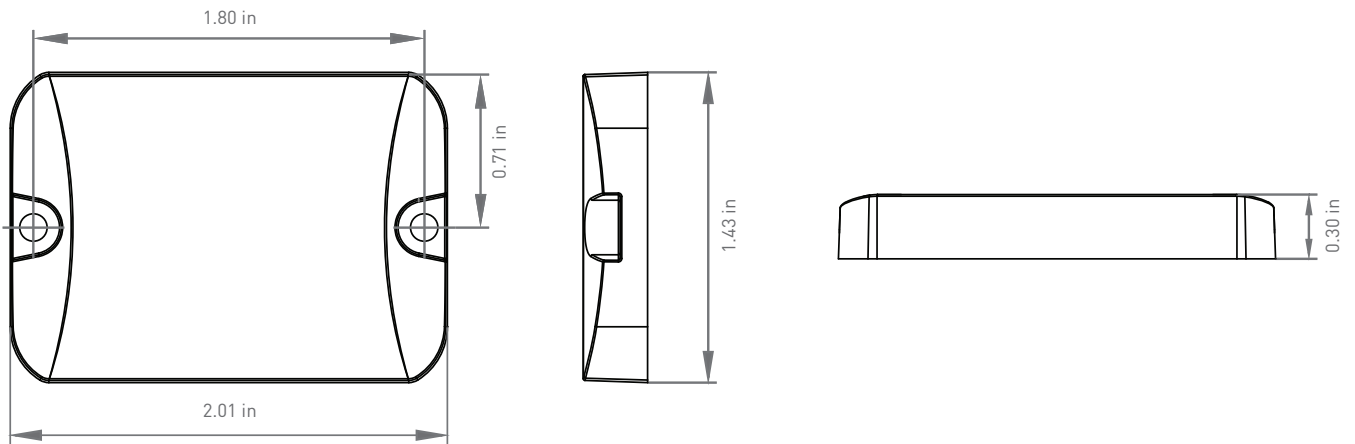
Environmental and Industry Compliance

RoHS	EU Directive 2002/95/EC
ATEX	ATEX Compliant



Operational and Environmental Specifications

Operational temperature	
Cold	-22°F (-30°C)
Dry heat	+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	+302°F (+150°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
Compression strength	181 psi (1250 kPa)
IP classification	IP68



Dimensions	2.01 x 1.43 x 0.30 in (51 x 36.3 x 7.5 mm)
Rivet hole diameter	0.126 in (3.2 mm)
Weight	0.92 oz (26 g)