

Xplorer



Functional Specifications

RF air protocol	EPCglobal Class 1 Gen 2; ISO18000-6C
Operating frequency	UHF 902-928 MHz (US); 865-868 MHz (EU)
IC type	Alien Higgs-3
Memory configuration	96-EPC bits, extensible to 480-bit; 64-bit unique TID, 512-bit user memory
Functionality	Read / write (user programmed)
Memory – expected read / write cycles	100,000 cycles at 25°C
Data retention	10 years

Performance Characteristics

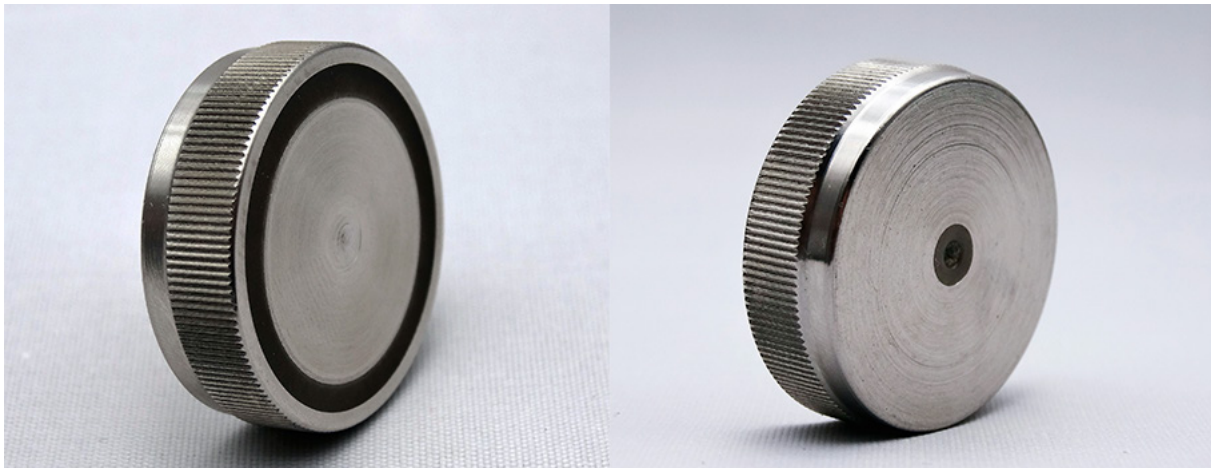
Read range embedded in metal (2W ERP):	Up to 5 ft (1.5 m)
Polarization	Linear
Recommended handheld reader*	TSL 1128 / 1166 (4W EIRP / 2W ERP)
Recommended fixed reader*	Impinj R220/R420 (30dBm transit power)
Recommended antenna power for fixed reader*	6dBi antenna gain, circular polarized antenna
Recommended transit power in total*	4W EIRP / 2W ERP

Physical Specifications

Material	Stainless steel 304
Mounting system	Snap in, embedded
Embed hole dimensions / tolerance (in)	ø 1.1 (+/-0.002) x 0.35 (+/-0.004)
Embed hole dimensions / tolerance (mm)	ø 28 (+/-0.05) x 9.0 (+/-0.1)



*For best tag performance in practical application the readers listed above are strongly recommended. Actual read range may vary based upon use case and antenna power.



Operational and Environmental Specifications

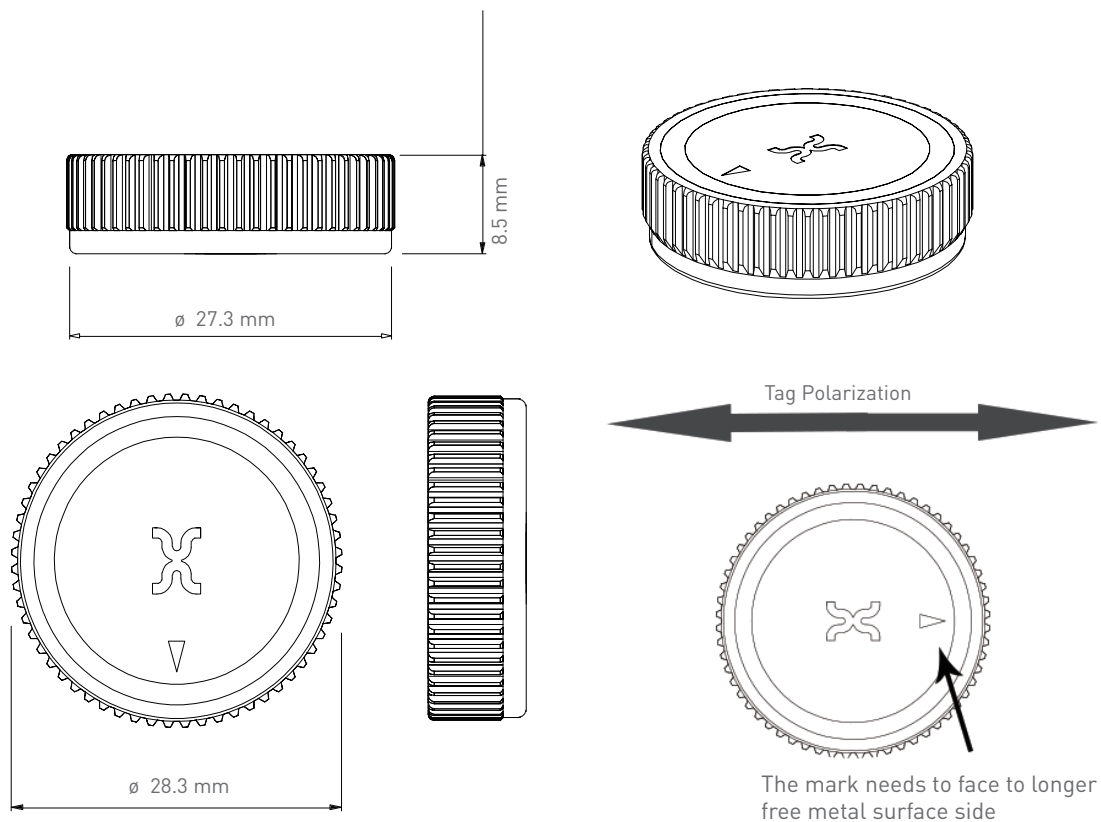
Operational temperature	
Cold	- 40°F (-40°C)
Dry heat (Long term, weeks/months/years)	+185°F (+85°C)
Application temperature	
Cold	-58°F (-50°C)
Dry heat (Long term, weeks/months/years)	+482°F (+250°C)
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Chemical Resistance	Withstands drilling fluids and hydraulic fluids including hydrogen sulphide.
Vibration	MIL-STD-810F
Compression Strength	30,000 psi (206 MPa)
Weather ability	All weather including UV-resistance and sea water immersion

Product Dimensions and Weight

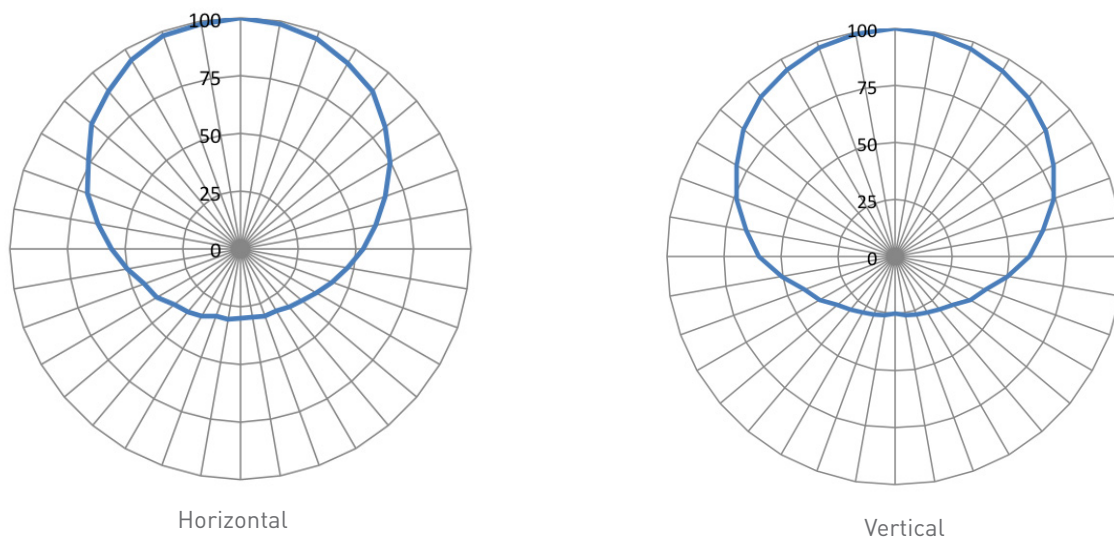
Dimensions (in)	ø 1.11 x 0.33
Tolerance	+/- 0.004
Dimensions (mm)	ø 28.3 x 8.5
Tolerance	+/- 0.1
Weight	0.89 oz (25.4 g)

Industry Compliance

RoHS	EU Directive 2011/65/EU
CE	Yes
ATEX/IECEX	Certified
IP rating	IP 69K



Radiation Pattern



Order information

X1115-US101-H3

Xplorer US

X1115-EU101-H3

Xplorer EU

Optional service

Tag pre-encoding and Laser engraving