

## 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

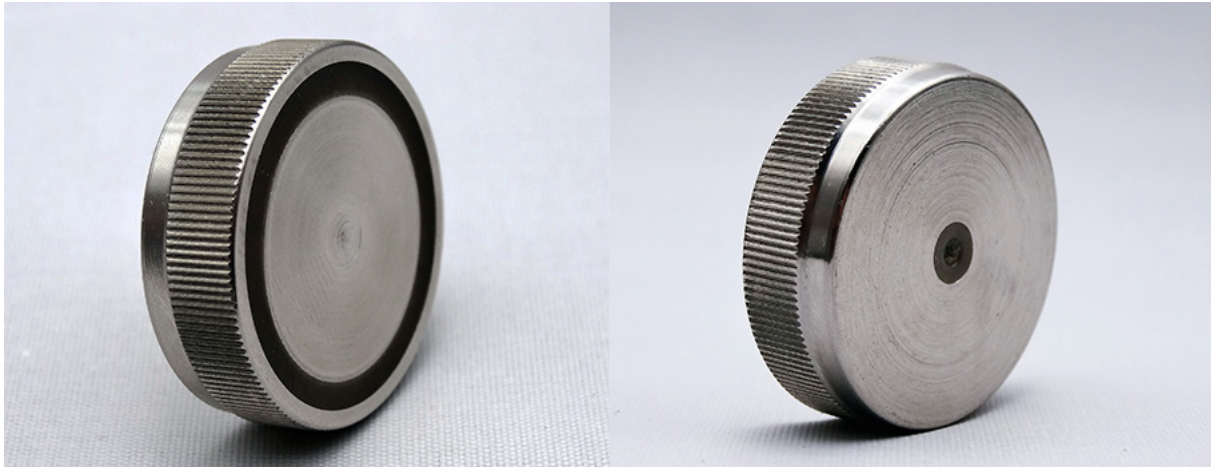
Read range embedded in metal (2W ERP):	Up to 5 ft (1.5 m)
Polarization	Linear
Recommended handheld reader*	TSL 1128 / 1166 (4W EIRP / 2W ERP)
Recommended fixed reader*	Impinj R220/R420 (30dBm transit power)
Recommended antenna power for fixed reader*	6dBi antenna gain, circular polarized antenna
Recommended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

### Physical Specifications

Material	Stainless steel 304
Mounting system	Snap in, embedded
Embed hole dimensions / tolerance (in)	∅ 1.1 (+/-0.002) x 0.35 (+/-0.004)
Embed hole dimensions / tolerance (mm)	∅ 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**

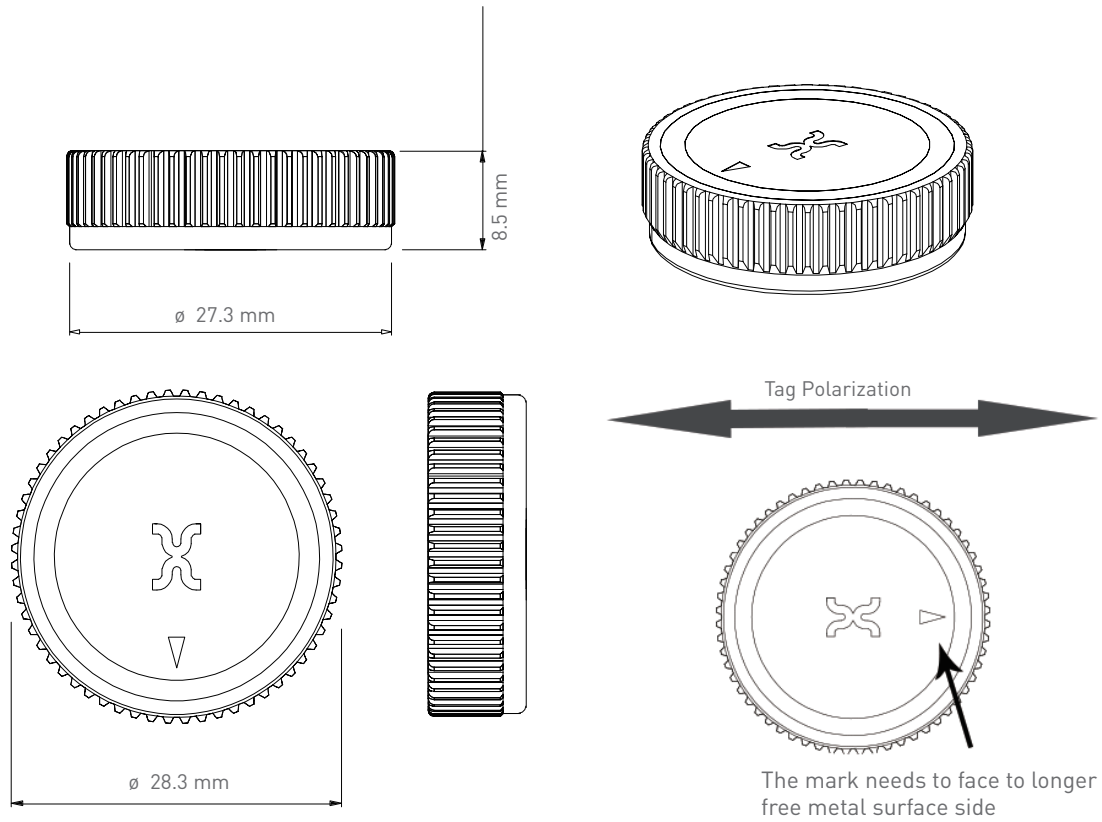
Operational temperature	
Cold	- 40°F (-40°C)
Dry heat (Long term, weeks/months/years)	+185°F (+85°C)
Application temperature	
Cold	-58°F (-50°C)
Dry heat (Long term, weeks/months/years)	+482°F (+250°C)
Humidity	
Operational humidity	5%-95% non-condensing
Storage humidity	5%-95% non-condensing
Chemical 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**

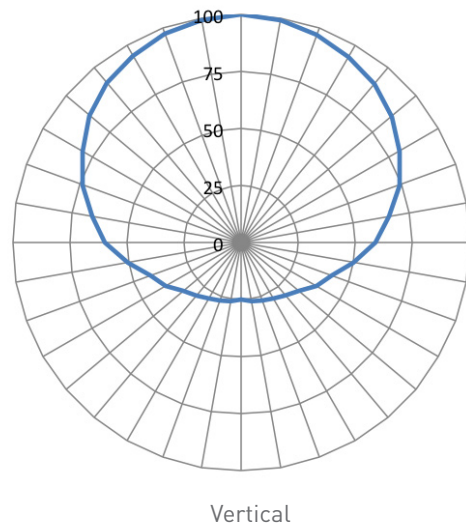
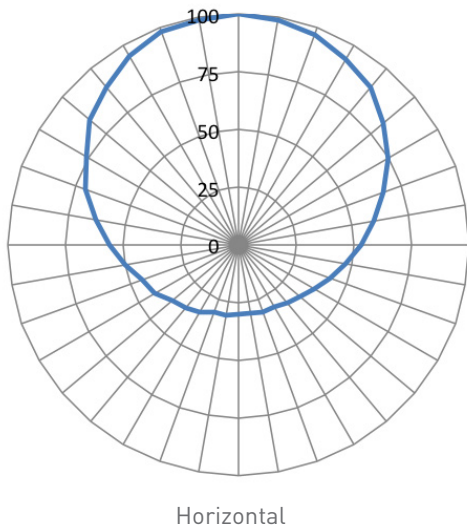
Dimensions (in)	∅ 1.11 x 0.33
Tolerance	+/- 0.004
Dimensions (mm)	∅ 28.3 x 8.5
Tolerance	+/- 0.1
Weight	0.89 oz (25.4 g)

**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