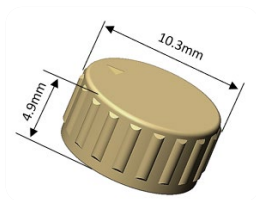


Oil 100

The Oil 100 is a small and durable UHF RFID tag for embedded applications, It can be used for a long time in the harsh environment of high temperature up to 200°C (392°F) and pressure up to 75MPa (10888psi) , the Oil 100 tag can be easily embedded in the metal, read range up to 1 meters.

APPLICATIONS

- Oil pipe tracking
- Oil-gas assets tracking and identification
- Precise Mold management



FEATURES

- Compact size suitable for small metal assets
- Embedded design for easy and quick installation
- Applicable to extreme application of high temperature, high pressure and chemicals.

RF Specifications

RF protocol	ISO18000-6C, EPC Class 1 Gen2
Operating frequency	865-868MHz (EU); 902-928MHz (US)
Chip type	Higgs 3
Memory configuration	96-Bits EPC (extensible to 480b) 512-Bits User 64-Bits Unique TID
Data retention	50 years at operation temperature
Read range on metal (2W ERP) ¹	Up to 1 M (3.3 ft) embedded
Read range off metal (2W ERP) ¹	Limited
Polarization	Linear

¹Read ranges are achieved by lab testing methodology, the read range will vary with output power of reader and applications.

Physical Specifications

Material	PEEK
Color	Beige
Dimensions	ø10.3 x 4.9mm ±0.1mm (ø0.4 x 0.2 ±0.006 in)
Weight	0.03 oz (0.9 g)

Operational and Environmental Specifications

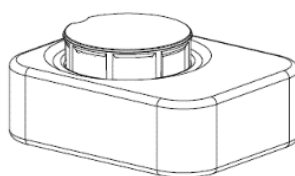
Operational temperature	-40°F (-40°C) to +185°F (+85°C)
Survivability temperature	-48°F (-40°C) to +392°F (+200°C)
Compressive strength	75MPa (10888psi) embedded
Operational humidity	5% to 95% non-condensing
IP Rating	IP69k
Shock and Vibration	MIL STD 810-G

Drop spec	Multiple drops to concrete: 4 ft./1.2 m across the operating temperature range
Chemical resistance ² :	No significant changes after ² :
- Salt water (15% salinity) exposure - Sodium Hydroxide (10% pH 14) exposure - Sulfuric acid (10%, pH 2) exposure - Engine oil exposure - Isopropyl exposure - alcohol Industrial cleaner exposure - Epoxy resin coolant exposure - Industrial rust lubricant exposure - Acetone exposure - Gasoline exposure - Diesel fuel exposure - Soap solution (30%) exposure - Carboxylic acids exposure	168 hours 168 hours 168 hours 168 hours 48 hours 48 hours 48 hours 48 hours 48 hours 48 hours 48 hours 48 hours 48 hours

²The chemical resistance is based on the concentration of solutions and application environment, please contact us for further details on chemical.

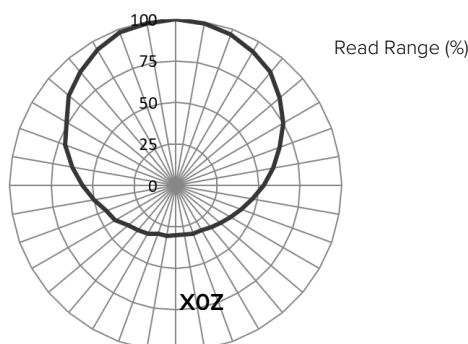
Mounting System

Mechanical fixings	- Knock In - Recommended hole size $\varnothing$ 10 x 5.2 mm
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Radiation Pattern

On metal



Order Information

WJT-C0611-1	Oil 100 EU
WJT-C0611-2	Oil 100 US

OTHERS

Options	Laser engraving, Per-Encoding
Warranty	1 year

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience and the pictures and illustrations presented in this document are for illustration purposes only. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use.

