

Omni-ID® Fit 400

The Fit 400 is a small form factor, High Temperature RFID tag capable of surviving cycling applications with temperatures to 235°C. Don't sacrifice performance for size. With up to a 4 meter read range, the Fit 400 is the perfect solution when space is limited, but performance is demanded.

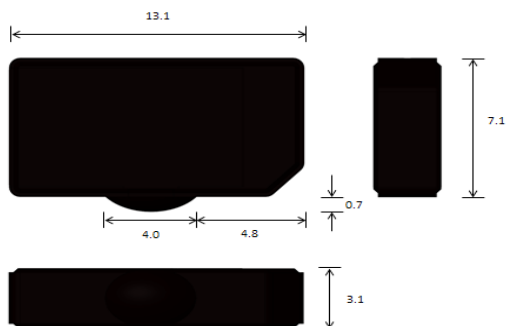
Applications

With its small form, high temperature capability and high performance, the Omni-ID Fit 400 tags are ideally suited to tracking small metal assets such as :

- ▶ Metal hand tools
- ▶ Metal IT assets including covert tracking
- ▶ Embedding into metal components
- ▶ Autoclaves and high temperature sterilizations

Physical Specifications

Finish	Painted black
Size (mm) (tolerance)	13.1 x 7.8 x 3.1 including IC bump +/-0.5
Size (in) (tolerance)	0.52 x 0.31 x 0.12 including IC bump +/-0.02
Weight (g)	1.6



Dimensions stated in mm

RF Specifications

Protocol	EPC Class 1 Gen2v2
Frequency Range (MHz)	866-868 (EU) 902-928 (US)
Read Range (Fixed reader) ¹	Up to 4m (13.1ft)
Read Range (Handheld reader) ¹	Up to 2m (6.6ft)
Material Compatibility	Optimized for metal
IC Type (chip)	Alien H3
Memory ^{2,3}	EPC - 96bits User - 512bits Unique TID - 64bits

¹ Quoted performance achieved using standard testing methodology. Read range will vary with reader hardware and output power.

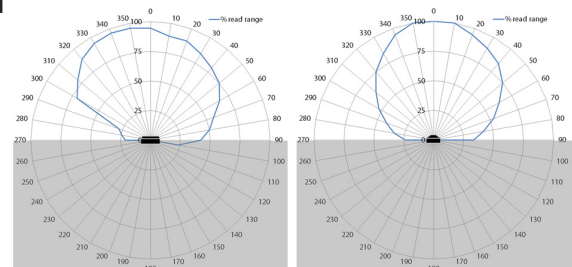
² EPC and User memory are reprogrammable, UTID is locked at point of manufacture.

³ Data retention 50 years at our operation temperature.

Radiation Patterns

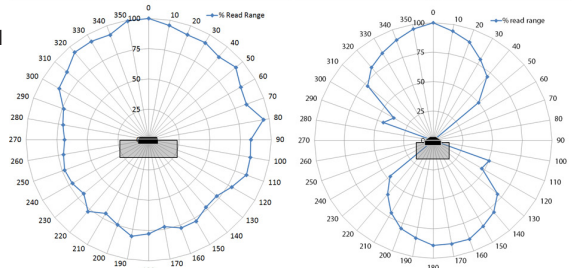
Large Metal

Sheet



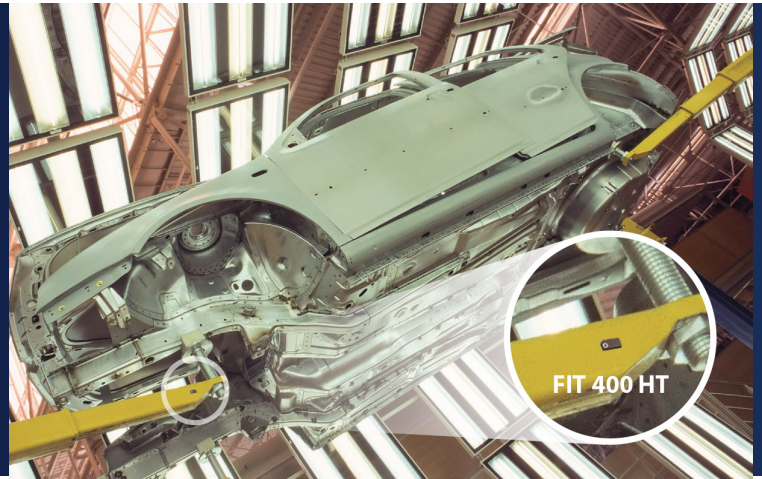
Small Metal

Asset



Related Products and Services

- ▶ **Omni-ID Fit 220** — Extremely small footprint, high temperature capable RFID tag for tracking very small metal assets.
- ▶ **Omni-ID Fit 210** — High Temperature, slim, low profile, on metal RFID tag optimized for application to small metal assets.
- ▶ **Omni-ID Exo 400** — Small RFID tag designed with rugged encapsulation for harsh environments, capable of surviving temperatures to 235°C.
- ▶ **Service Bureau** — Omni-ID offers a full service bureau for printing and pre-encoding Omni-ID tags at point of manufacture.



Environmental Specifications

Operation Temperature ¹	-20°C to +85°C
Max Temperature Exposure ^{1,3}	-20°C to +235°C
IP Rating	IP68
Shock and Vibration	MIL STD 810-G
Attachment ²	Film adhesive (included) For placement only in applications exceeding +85°C
Warranty	1 year

¹ Excludes adhesive options, consult adhesive datasheets for recommended temperature ratings.
² The product has been designed for optimal RF performance when used with 130 micron +/-20% adhesive under the tag.
³ Maximum constant exposure = 700 hours.

Ordering Information

Order Codes	124 – EU, US
Option Codes	:304 (ATEX/IECEX certified) :307 (US&Canada (C1D1/D2) certified) :508 (premium foam) :701 (Standard Service Bureau)

¹ Label is not rated for high temperatures.

Certifications:



RoHS approved
 CE approved
 ATEX/IECEX certified (option)
 US & Canada (C1D1/D2) certified (option)

Omni-ID office locations: US | UK | China | India | Germany
For product or technology inquiries email: sales@omni-id.com