

# Omni-ID® Fit 400

The Fit 400 is a small form factor, High Temperature RFID tag capable of surviving cycling applications with temperatures to 225°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.

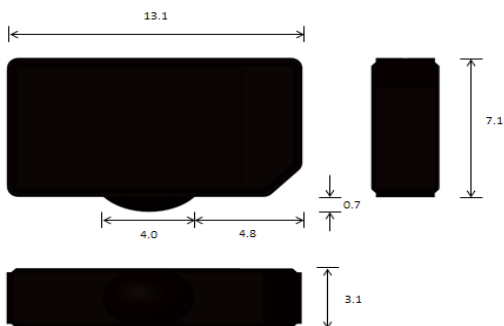
## Applications

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 with IC bump 13.1 x 7.1 x 3.1 without IC bump +/-0.5
Size (in) (tolerance)	0.52 x 0.31 x 0.12 with IC bump 0.52 x 0.28 x 0.12 without IC bump +/-0.02



Dimensions stated in mm

## RF Specifications

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

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

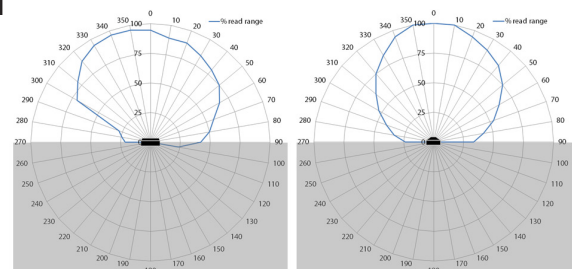
<sup>2</sup> EPC and User memory are reprogrammable, UTID is locked at point of manufacture.

<sup>3</sup> Data retention 50 years at our operation temperature.

## Radiation Patterns

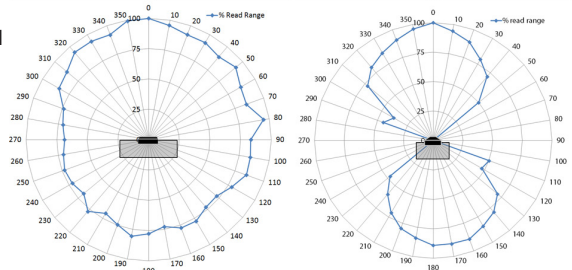
### Large Metal

#### Sheet



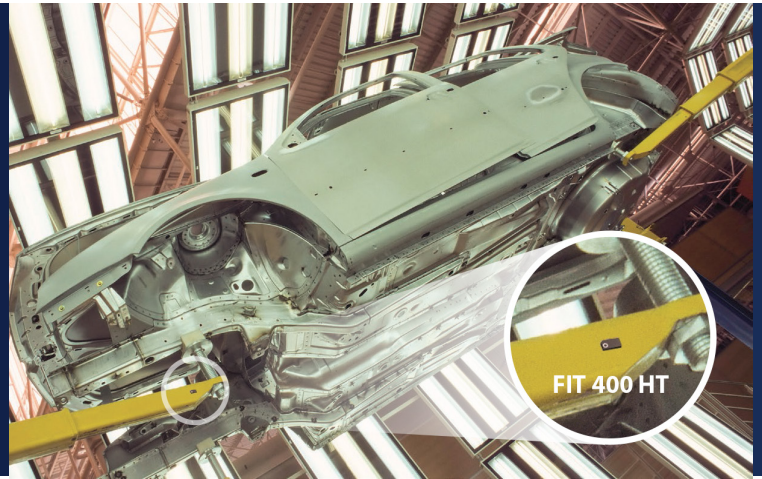
### Small Metal

#### Asset



## Related Products and Services

- ▶ **Omni-ID Fit 200** — 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 <sup>1</sup>	-40°C to +85°C
Max Temperature Exposure <sup>1,3</sup>	-40°C to +225°C
IP Rating	IP68
Shock and Vibration	MIL STD 810-G
Attachment <sup>2</sup>	Film adhesive (included) For placement only in applications exceeding +85°C
Warranty	1 year

<sup>1</sup> Excludes adhesive options, consult adhesive datasheets for recommended temperature ratings.  
<sup>2</sup> The product has been designed for optimal RF performance when used with 130 micron +/-20% adhesive under the tag.  
<sup>3</sup> Maximum constant exposure = 168 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)

<sup>1</sup> 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](mailto:sales@omni-id.com)**