Omni-ID®

Building Intelligent Supply Chains

	STANDARD
	HIGH TEMPERATURE
	EMBEDDED

Omni-ID® Fit 400

The Fit 400 is a small form factor, high performance RFID tag available in three versions. The High Temperature version expands the capabilities of this small ceramic tag to cycling applications with High 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.

Building Intelligent Supply Chains

With its small form, temperature versions and high performance, 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

Specifications

Fit 400	STANDARD	HIGH TEMPERATURE	EMBEDDED
Finish	Painted Black	Painted Black	Unpainted
Size (mm)	13.1 x 7.1 x 3.1	13.1 x 7.1 x 3.1	18 x 12 x 3.5
Weight (g)	1.6	1.6	3.9
Operation Temperature (°C)[1] Max Temperature Exposure (°C) [1]	-20 to +85°C -20 to +85°C	-20 to +85°C -20 to +225°C	-20 to +85°C -20 to +85°C
Ingress Protection	IP68	IP68	IP68
Shock and Vibration	MIL STD 810-G	MIL STD 810-G	MIL STD 810-G
Attachment	Film adhesive (included) Permanent liquid adhesive (option)	Film adhesive[2](option)for placement only Permanent liquid adhesive (option)	Omni-ID carrier (included)[4]
Memory[3]	EPC: 96bits User: 512bits TID: 64bits	EPC: 96bits User: 512bits TID: 64bits	EPC: 96bits User: 512bits TID: 64bits
Frequency Range (MHz)	902–928 (US) 866–868 (EU)	902–928 (US) 866–868 (EU)	902–928 (US) 866–868 (EU)
Fixed reader Read Range (m) Handheld reader Read Range (m)	Up to 4.0 Up to 2.0	Up to 4.0 Up to 2.0	Up to 4.0 Up to 2.0
Material Compatibility	Optimized for metal	Optimized for metal	Optimized for metal
IC Type	Alien Higgs 3	Alien Higgs 3	Alien Higgs 3

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. EPC and User memory are reprogrammable, TID is locked at point of manufacture.
4. See Omni-ID Embedded Fit Tag User Guide for epoxy options.

![Omni-ID® Building Intelligent Supply Chains]

Visit **www.omni-id.com** to learn more about
the complete line of Omni-ID RFID products.

Related Products and Services

▶ **Omni-ID Fit 200 —** Extremely small footprint 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 and for embedding.

▶ **Omni-ID Fit 400P —** Small footprint tag optimized for application to small plastic assets and embedding.

▶ **Service Bureau —** Omni-ID offers a full service bureau for printing and pre-encoding Omni-ID tags at point of manufacture.

For a standard Embedded Fit 400 application, the recommended circular recess is a diameter of 26mm and depth of 5.5mm. Sourcing and validation of epoxy or potting compound used is the responsibility of the customer. Please see the **Omni-ID Embedded Fit Tag User Guide** for epoxy types qualified by Omni-ID and more information on the custom service options.
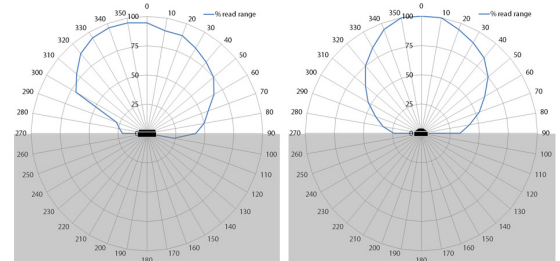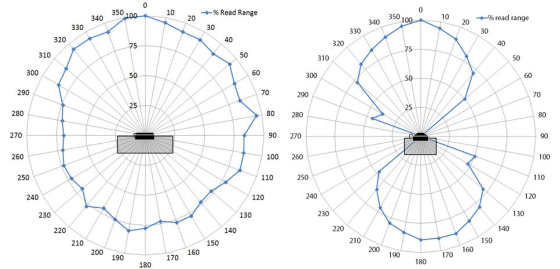
Radiation Patterns

Large Metal Sheet

Small Metal Asset

Radiation patterns for the embedded version will vary dependent on the geometry and composition of the asset type.

Certifications:

CE   RoHS   Ex

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

Ordering Information

Fit 400	STANDARD	HIGH TEMPERATURE	EMBEDDED
Order Codes	051 – (EU, US)	124 – (EU, US)	128 – (EU, US)
Option Codes	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada (C1D1/D2) certified) :701 (Standard Service Bureau)	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada (C1D1/D2) certified) :502 (Film adhesive option for placement only) :701 (Standard Service Bureau)	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada (C1D1/D2) certified) :701 (Standard Service Bureau)

Omni-ID office locations: US | UK | China | India | Germany

For product or technology inquiries email: sales@omni-id.com