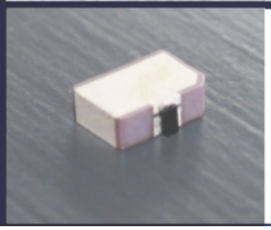
Omni-ID®

■ STANDARD



■ EMBEDDED

# Omni-ID® Fit 200

Omni-ID Fit 200 is an extremely small form factor RFID tag optimized for metal substrates, available in 2 versions. Designed for tracking very small metal assets, Fit 200 is compatible with typical finishing processes, such as dipping, coating, heat shrinking and moulding for embedding into tools and other high value equipment.

## Building Intelligent Supply Chains

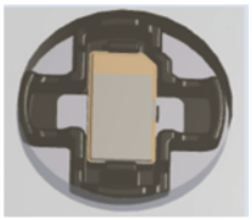
With its extremely small form factor, Omni-ID Fit 200 tags are ideally suited to tracking small metal assets including attachment to:

- Small Hand Tools including sockets
- Metal IT assets including covert tagging
- Healthcare instruments

## Physical Specifications

| Version | ■ STANDARD | ■ EMBEDDED |
|---|---|---|
| Finish | Painted black - top & sides | Unpainted |
| Size (mm) (tolerance) | 8.6 x 6.1 x 2.6 +/- 0.5 | 13.1 x 7.5 x 3 |
| Size (in) (tolerance) | 0.34 x 0.24 x 0.10 +/- 0.02 | 0.52 x 0.29 x 0.11 |
| Weight (g) | 0.8 | 1.4 |

### Fit 200 embedded tag in the carrier



For a standard Embedded Fit 200 application, the recommended circular recess is a diameter of 22mm and depth of 5.0mm. Placement into the recess is carrier face down. 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.*

## RF & Environmental Specifications

| Version | ■ STANDARD | ■ EMBEDDED |
|---|---|---|
| Protocol | EPC Class 1 Gen2 | EPC Class 1 Gen2 |
| Frequency Range (MHz) | 866-868 (EU) 902-928 (US) | 866-868 (EU) 902-928 (US) |
| Read Range (Fixed reader)[1] | Up to 2.5m (8.2ft) | Up to 2m (6ft) |
| Read Range (Handheld reader)[1] | Up to 1.25m (4.1ft) | Up to 1m (3ft) |
| Material Compatibility | Optimized for metal | Optimized for metal |
| IC Type (chip) | Alien Higg 3 | Alien Higgs 3 |
| Memory [2] | EPC: 96bits User: 512bits Unique TID: 64bits | EPC: 96bits User: 512bits Unique TID: 64bits |
| Operation Temperature | -20°C to +70°C | -20°C to +85°C |
| Max Temperature Exposure | -20°C to +70°C | -20°C to +85°C |
| IP Rating | IP68 | IP68 |
| Shock and Vibration | MIL STD 810-G | MIL STD 810-G |
| Attachment | Film adhesive (included) Permanent liquid adhesive (option) | Omni-ID Carrier (included)[3] |
| Warranty | 1 year | 1 year |

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, TID is locked at point of manufacture.
3. See Omni-ID Embedded Fit Tag User Guide for epoxy options.



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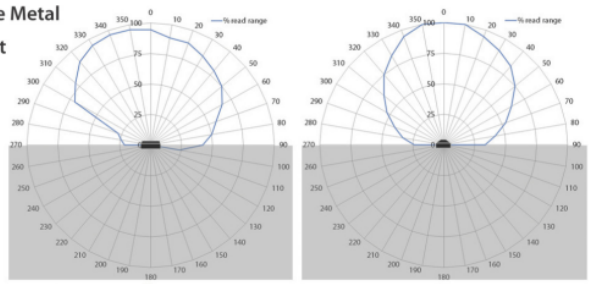
## Related Products and Services

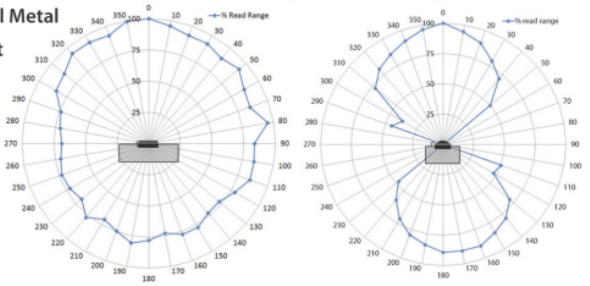
- **Omni-ID Fit 100 -** Extremely small footprint RFID tag for tracking very small metal assets.
- **Omni-ID Fit 210 -** Low profile, high temperature, global frequency, on metal RFID tag for small metal assets.
- **Omni-ID Fit 400-** High temperature, low profile, on metal RFID tag available in 4 versions optimized for application to small metal assets and embedding.
- **Service Bureau** - Omni-ID offers a full service bureau for printing and pre-encoding Omni-ID tags at point of manufacture.

## 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.

## Ordering Information

| | |
|---|---|
| Order Codes | |
| ■ STANDARD | 050 – EU, US |
| ■ EMBEDDED | 127 – EU, US |
| Option Codes | |
| | :303 (Customization) |
| | :304 (ATEX/IECEx certified) |
| | :307 (US&Canada (C1D1/D2) certified) |
| | :701 (Standard Service Bureau) |

## Certifications:

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