

## Omni-ID® Fit 210

The Fit 210 is a High Temperature RFID tag capable of surviving cycling applications with temperatures to 225°C. Its narrow, low profile, small form-factor make the Fit 210 an ideal tag for integration within finishing processes, such as dipping, coating, heat shrinking and moulding in the harshest of environments.

## Applications

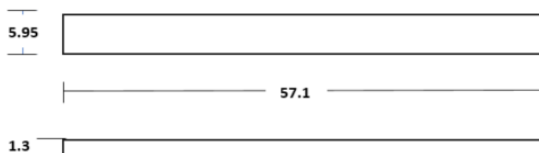
With its low profile and durable design, Omni-ID's Fit 210 tags are ideally suited to tool tracking and embedding applications such as:

- ▶ Hand tools, including wrenches and ratchet tools
- ▶ Paint processes in automotive
- ▶ Integration within IT assets at point of manufacture
- ▶ Healthcare — high temperature sterilization

## Physical Specifications

Finish	Red
Size (mm)	57.1 × 5.95 × 1.3
Size (in)	2.25 × 0.23 × 0.05
Weight (g)	1.0

## Dimensions



Dimensions stated in mm

## RF Specifications

Protocol	EPC Class 1 Gen2v2
Frequency Range (MHz)	866-868 (EU), 902-928 (US)
Read Range (Fixed) <sup>1</sup>	Up to 2m (6.6ft)
Read Range (Handheld) <sup>1</sup>	Up to 1m (3.3ft)
Material Compatibility	Optimized for metal
IC Type (chip)	Alien Higgs 3
Memory <sup>2,3</sup>	EPC: 96bits User: 512bits Unique TID: 64bits

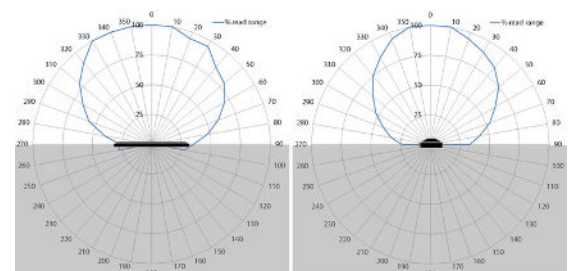
<sup>1</sup> Quoted performance achieved using standard testing methodology. Read range will vary with reader hardware and output power.

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

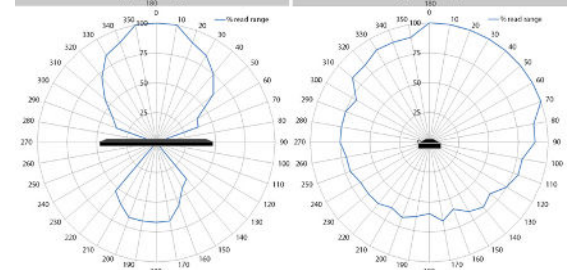
<sup>3</sup> Data retention 50 years at our operation temperature.

## Radiation Patterns

### On Metal

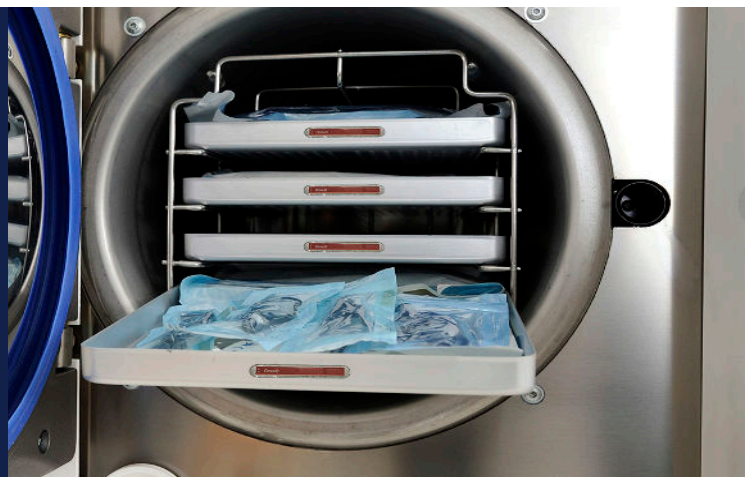


### On Plastic



## Related Products and Services

- **Omni-ID Fit 220** — The smallest form-factor high temperature tag capable of surviving temperatures to 235°C.
- **Omni-ID Fit 400** — High temperature, 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>1,2</sup>	–20°C to +85°C
Max Temperature Exposure <sup>1,2</sup>	–20°C to +225°C
IP Rating	IP68
Shock and Vibration <sup>3,4</sup>	MIL STD 810-G
Attachment	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> Maximum constant exposure 12 hours.

<sup>3</sup> The product has been designed for optimal RF performance when used with 130 micron +/- 20% adhesive under the tag.

<sup>4</sup> Product designed to meet MIL STD 810-G. Please contact Omni-ID for further details.

## Ordering Information

Order Codes	123 (EU, US)
Option Codes	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada [C1D1/D2] certified) :701 (Standard Service Bureau) <sup>1</sup>

<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**  
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