



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

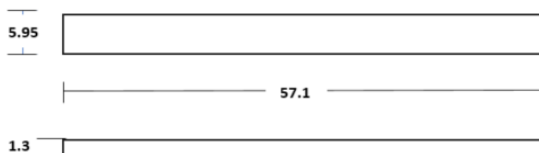
With its low profile and durable design, Omni-ID's Fit 210 tags are ideally suited to tool tracking and embedding applications such as:

- ▶ 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) ¹	Up to 2m (6.6ft)
Read Range (Handheld) ¹	Up to 1m (3.3ft)
Material Compatibility	Optimized for metal
IC Type (chip)	Alien Higgs 3
Memory ^{2,3}	EPC: 96bits User: 512bits Unique TID: 64bits

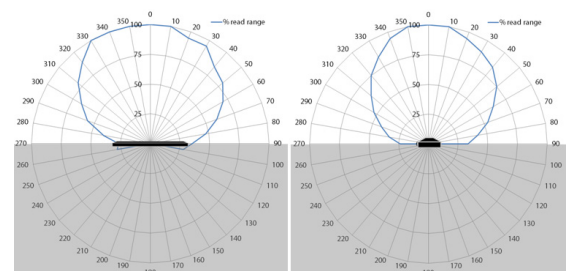
¹ Quoted performance achieved using standard testing methodology. Read range will vary with reader hardware and output power.

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

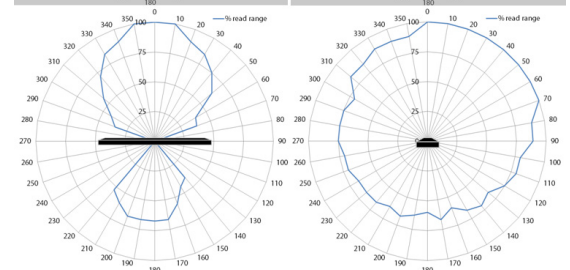
³ Data retention 50 years at our operation temperature.

Radiation Patterns

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 ^{1,2}	-20°C to +85°C
Max Temperature Exposure ^{1,2}	-20°C to +225°C
IP Rating	IP68
Shock and Vibration ^{3,4}	MIL STD 810-G
Attachment	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 Maximum constant exposure 12 hours.

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

⁴ 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) ¹

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