

## Omni-ID® Fit 220

Omni-ID's Fit 220 High Temperature tag is the smallest regional RFID tag with the capability to survive cycling applications to +235°C. The performance of the Fit 220 tag is not sacrificed by its small size and it is an ideal solution for tracking very small metal assets where space is limited.

### Applications

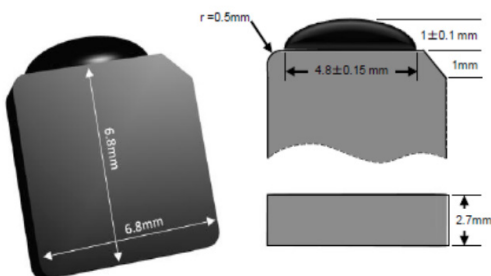
With its regional performance, high temperature capability and very small form factor, the Omni-ID Fit 220 tags are ideally suited to tracking small metal assets in applications such as:

- ▶ Small Hand Tools
- ▶ IT assets
- ▶ Healthcare instruments

### Physical Specifications

Finish	Painted black
Size (mm) (tolerance)	6.8 x 6.8 x 2.7 without IC bump 7.8 x 6.8 x 2.7 including IC bump +/- 0.5
Size (in) (tolerance)	0.27 x 0.27 x .11 +/- 0.02
Weight (g)	0.6

### Dimensions



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 2.2m (7.2ft)
Read Range (Handheld reader) <sup>1</sup>	Up to 1.4m (4.6ft)
Material Compatibility	Optimized for metal
IC Type (chip)	Alien Higgs 3
Memory <sup>2,3</sup>	EPC: 96bits User: 512bits Unique TID: 64bits

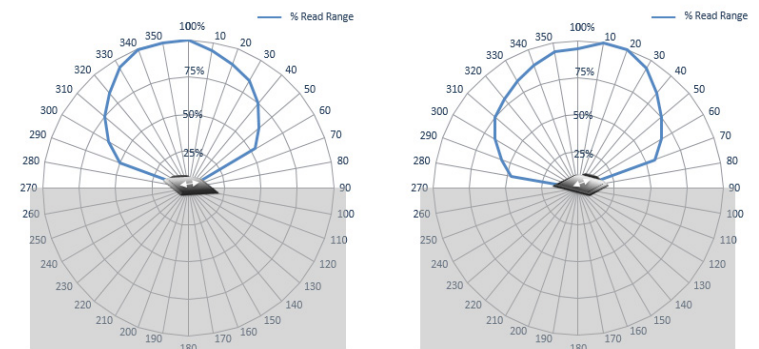
<sup>1</sup> Quoted performance achieved using standard testing methodology. Read range will vary with reader hardware and output power.

<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 Pattern

On Metal



## Related Products and Services

- ▶ **Omni-ID Fit 210** - Low profile, narrow, high temperature, on metal RFID tag for small metal assets.
- ▶ **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</sup>	-20°C to +85°C
Max Temperature Exposure <sup>1</sup>	-20°C to +235°C
IP Rating	IP68
Shock and Vibration <sup>2</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> 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 700 hours.

### Ordering Information

Order Codes	155 – 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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