

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

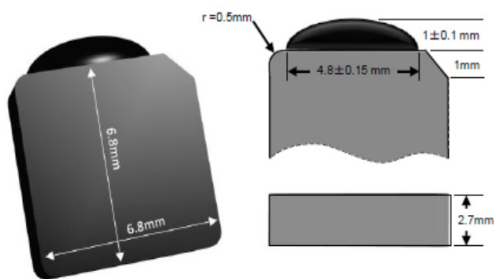
With its regional performance, high temperature capability and very small form factor, the Omni-ID Fit 220 tags are ideally suited to tracking small metal assets in applications such as:

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

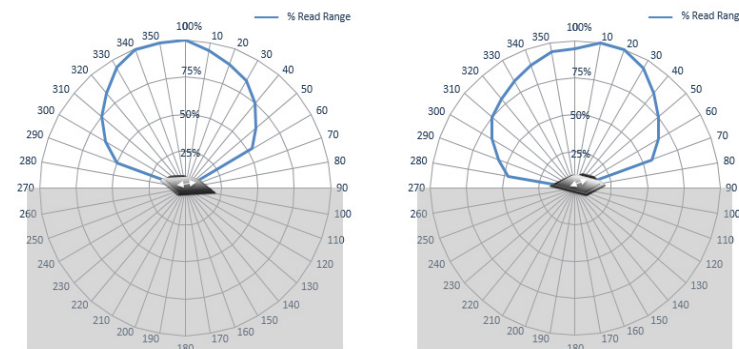
¹ Quoted performance achieved using standard testing methodology. Read range will vary with reader hardware and output power.

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

³ Data retention 50 years at our operation temperature.

Radiation 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 ¹	-20°C to +85°C
Max Temperature Exposure ¹	-20°C to +235°C
IP Rating	IP68
Shock and Vibration ²	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 The product has been designed for optimal RF performance when used with 130 micron +/-20% adhesive under the tag.
³ 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) 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