Omni-ID®

■ GLOBAL

■ HIGH TEMPERATURE

Omni-ID® Fit 210

The Fit 210 is a low profile, small form-factor RFID tag, available in two versions. The High Temperature version expands the capabilities of this small, narrow tag to cycling applications with high temperatures to 225°C. Adding a Global version expands the Fit 210 capabilities.   Both versions are ideal for integration within finishing processes, such as dipping, coating, heat shrinking and moulding in the harshest of environments.

Building Intelligent Supply Chains

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

RF & Environmental Specifications

Version	■ GLOBAL	■ HIGH TEMPERATURE
Protocol	EPC Class 1 Gen2	EPC Class 1 Gen2
Frequency Range (MHz)	860-930 (GS)	866-868 (EU), 902-928 (US)
Read Range (Fixed)[1]	Up to 2.5m (8.2ft)	Up to 2m (6.6ft)
Read Range (Handheld)[1]	Up to 1.4m (4.6ft)	Up to 1m (3.3ft)
Material Compatibility	Optimized for metal substrates	Optimized for metal substrates
IC Type (chip)	Alien Higgs 3	Alien Higgs 3
Memory [2,6]	EPC: 96bits User: 512bits Unique TID: 64bits	EPC: 96bits User: 512bits Unique TID: 64bits
Operation Temperature [3] Max Temperature Exposure [3]	−20°C to +85°C −20°C to +120°C	−20°C to +85°C −20°C to +225°C[4]
Attachment	Film adhesive (included)	Permanent liquid adhesive (not included) Film adhesive (option for placement only)
IP Rating	IP68	IP68
Shock and Vibration	MIL STD 810-G	MIL STD 810-G
Impact[5]	2kg from 1m	2kg from 1m
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. Excludes adhesive options, consult adhesive datasheets for recommended temperature ratings.
4. Maximum constant exposure 12 hours.
5. Testing methodology available on request.
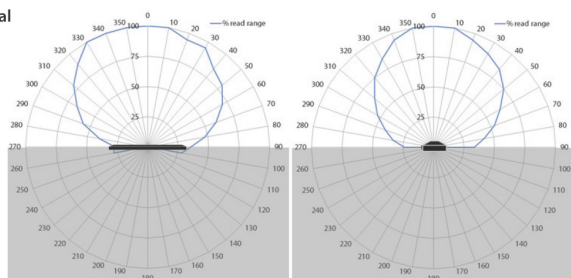6. Data retention 50 years at our operation temperature.

Physical Specifications

Version	■ GLOBAL	■ HIGH TEMPERATURE
Finish	Grey	Red
Size (mm)	53 × 5.0 × 1.5	57.1 × 5.95 × 1.3
Size (in)	2.09 × 0.20 × 0.06	2.25 × 0.23 × 0.05
Weight (g)	1.0	1.0

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Related Products and Services

▸ **Omni-ID Fit 100 —** The smallest form-factor tag available in two versions including the ability to survive 225°C.

▸ **Omni-ID Fit 400 —** Low profile, on metal RFID tag available in several versions; high temperature, embedded and global, optimized for small metal assets.

▸ **Omni-ID Fit 400P —** Small footprint tag optimized for application to small plastic assets and embedding.

▸ **Service Bureau —** Omni-ID offers a full service bureau for printing and pre-encoding Omni-ID tags at point of manufacture.
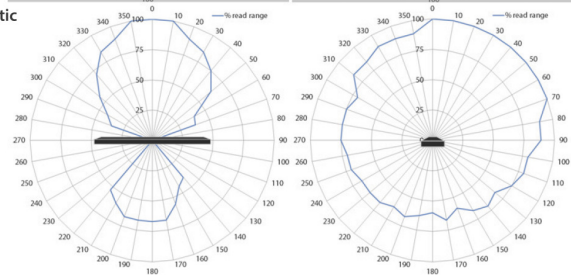
Radiation Patterns

On Metal

On Plastic

Ordering Information

Version	■ GLOBAL	■ HIGH TEMPERATURE
Order Codes	137 (GS)	123 (EU, US)
Option Codes	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada [C1D1/D2] certified) :701 (Standard Service Bureau)	:303 (Customization) :304 (ATEX/IECEx certified) :307 (US&Canada [C1D1/D2] certified) :502 (Film adhesive for placement only)[1] :701 (Standard Service Bureau)[1]

[1] Label is not rated for high temperatures.

Certifications:

CE RoHS Ex

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

DS0035-M |