

INVENGO GEM DRY INLAY



Impinj Monza 5



About Invengo's GEM

The Invengo GEM tags equipped with the Impinj Monza 5 are designed to enable end-users to reach and sustain high levels of performance in all global RAIN RFID (UHF) frequency regions. The Invengo GEM tag is especially designed to tag small items within the retail environment as jewelry and eyeglasses in which it can be called one of the best in class.



Invengo – the global RFID technology provider – is a leading developer and manufacturer of high quality, intelligent RAIN RFID and HF/NFC connectivity solutions and consumables (tags & inlays) utilized in the Internet of Things. With a focus on RFID innovation, Invengo has created a leading product line in retail, (industrial) laundry, library, (public) transportation, healthcare, and many other industries.

Invengo Technology Pte. Ltd. (SG) is the International Headquarters of Invengo Information Technology Co. Ltd, listed on Shenzhen Stock Exchange (SZSE: 002161.SZ). Employing over 600 people globally, Invengo is one of the largest publicly traded, RFID / IoT oriented companies in the world.

Key Benefits

- High performance product for item-level tagging in retail
- Especially designed for jewelry and eyeglasses
- Ideal, compact design with integrated tail
- Easy to apply
- ISO 9001:2008 Quality Management System and ISO 14001:2004 Environment Management System support
- 100% Quality Tested

Product Specifications

RFID

Protocols Supported	EPCglobal C1 Gen 2, ISO/IEC18000-63
Integrated Circuit (IC)	Impinj Monza 5
Operating Frequency	840 to 960MHz
EPC size	128 bits
TID	32bits model number and 48 bits serialized number
Access password	32 bits
Kill password	32 bits

Environmental

Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Recommended	-20°C to 50°C (-4°F to 122°F)
Shelf Life	Min. 2 yrs from date manufacturing in 20°C (68°F) @ 50% RH
Bending Diameter	> 50 mm, tension max. 10 N
Static Pressure	<10 MPa (10 N/mm ²)
ESD	± 2000V peak

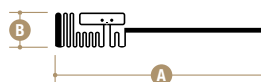
Dimensions

Antenna Size (A x B)	66,6 x 10,95 mm (2.62 x 0.43 in)
Web Width (E)	75 mm (2.95 in)
Pitch (F)	51,95 mm (2.045 in)
PET Thickness	0,05 mm (0.002 in)
Antenna Thickness	0,009 mm (0.0003 in)
Die-cut to gap	3,95 mm (0.156 in)
Core Size (H)	76 mm (3 in)

Order Information

Product code	XCTF-8108-C13
Packaging	Carton boxes
Quantity pc p/roll; roll p/box	5000 pcs/roll; 4 rolls/box

Inlay Design



Inlay Stackup



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INVENGO GEM LABEL



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Bending Diameter	> 50 mm, tension max. 10 N
Static Pressure	<10 MPa (10 N/mm ²)
ESD	± 2000V peak
Adhesive	Acrylic

Dimensions

Antenna Size (A x B)	66,6 x 10,95 mm (2.62 x 0.43 in)
Die-cut Size (C x D) tail	25 x 13 mm (0.98 x 0.51 in)
Die-cut Size (C x D) with tail	43 x 2 mm (1.69 x 0.08 in)
Web Width (E)	75 mm (2.95 in)
Pitch (F)	51,95 mm (2.045 in)
PET Thickness	0,05 mm (0.002 in)
Antenna Thickness	0,009 mm (0.0003 in)
Die-cut to edge (G)	5 mm (0.197 in)
Die-cut to gap	3,95 mm (0.156 in)
Core Size (H)	76 mm (3 in)

Order Information

Product code	XCTF-8108-C13-FPI
Packaging	Carton boxes
Quantity pc p/roll; roll p/box	1500 pcs/roll; 4 rolls/box

Inlay Design



Inlay Stackup

	Paper Face
	Adhesive
	PET Substrate
	Aluminium Antenna
	IC
	Adhesive
	Silicone Liner

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