



## RFID Tag on Metal (TOM®) Labels

Comprehensive Set of HF RFID Labels for  
Metallic Environments

Standard radio frequency identification (RFID) tags are not designed for placement near metal. The technology behind Identiv's RFID Tag on Metal (TOM®) Labels is unique to Identiv and features substantial technical and economic benefits for a wide variety of applications with surrounding metal environments. These high frequency (HF) labels (ISO/IEC 14443 or 15693) are equipped with a unique shielding technology that provides an optimum read range when applied to metallic surfaces.

Due to their extreme flexibility and ease of application, Identiv's TOM Labels can be used for automatic data capture on metallic surfaces and objects in the following applications:

- Interactive mobile applications (i.e., micro-payment, advertising, loyalty, or access)
- Production process control and traceability
- Counterfeit protection
- Asset and inventory management (i.e., tool tracking, servers, computers, etc.)
- Medical environments (i.e., equipment identification and tracking)
- Shelf or location tagging
- Transportation projects and NFC-based applications

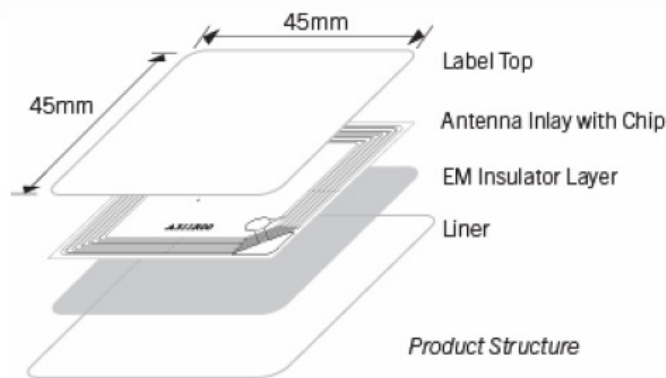
These 13.56 MHz HF labels deliver maximum performance for RFID applications running in harsh environments that include all types of metal. The tags can adhere to any type of surface, including mobile phone backings or parts containing metal in or on them. Identiv's TOM Labels are equipped with a ferrite backing that prevents RFID waves from reflecting off the target device. The labels are composed of an Identiv-developed inlay attached to the ferrite substrate and adhesive. The ferrite is embedded in the label to deliver maximum usability and performance with RFID readers in the field.

Identiv's TOM Labels are only for use on metal-mount surfaces. It is not recommended to apply the tags to non-metal surfaces or to use standard labels on metallic applications (as the presence of metal will detune the resonance frequency of a tag that is not designed to be placed on metal).

For applications that need customization, TOM Labels can receive special printing, serial numbers, barcodes/QR codes, or electrical chip personalization before shipping.

## Product Details

SPECIFICATIONS	
STANDARD DIMENSIONS	45 x 45 mm (1.77 x 1.77 in) 40 x 40 mm (1.57 x 1.57 in) 45 x 25 mm (1.77 x 0.98 in) 40 x 20 mm (1.57 x 0.79 in) Diameter 28 mm (1.10 in) Diameter 23 mm (0.90 in) Diameter 18 mm (0.70 in) More sizes available upon request – minimum order quantities may apply
ANTENNA	PET with copper and aluminium-etched antenna; specialized substrate for various applications
ADHESIVE/LINER	Acrylic adhesive/release paper liner
INSULATOR LAYER	Ferrite
TOTAL ANTENNA THICKNESS	Approximately 400 um (15.74 mils)
NOMINAL CHIP THICKNESS	120 - 150 um (4.70 - 5.90 mils), depending on chip type
PROTOCOL AND CHIPS	<ul style="list-style-type: none"> <li>ISO/IEC 15693 and ISO/IEC 14443; NFC compliance chips Type 1, 2, 3, and 4; Broadcom, Infineon, STM, NXP, Sony, etc.</li> </ul> Examples: NXP MIFARE Ultralight EV1 and C versions, NXP MIFARE Classic EV1 family, NXP NTAG series, NTAG ICODE, Infineon My-d move SLE 66R family, and more.
ESD	+2KV maximum peak, human body model (HBM) according to chip specification
TESTING	Electrical inspection on 100% of units; rejects are identified with a square or round mark
LABEL SELECTION	ISO 9706 paper, high gloss paper, PET, PP, or specialized label material for specific applications
PRODUCT RANGE	Blank, printed, metal compatible, doming, tamper-proof with security cut, specialized adhesive, weatherproof, etc.
MINIMUM ORDER QUANTITY	20,000 pieces delivered on several rolls; number of units per roll is dependent on the label size



Identiv (NASDAQ: INVE) is the leading global player in physical security and secure identification. Identiv's products, software, systems, and services address the markets for physical and logical access control and a wide range of RFID-enabled applications. Customers in the government, enterprise, consumer, education, healthcare, and transportation sectors rely on Identiv's access and identification solutions. Identiv's mission is to secure the connected physical world: from perimeter to desktop access, and from the world of physical things to the Internet of Everything.

Identiv has offices worldwide. Addresses and phone numbers are listed at [identiv.com/contact](http://identiv.com/contact). For more information, visit [identiv.com](http://identiv.com) or email [sales@identiv.com](mailto:sales@identiv.com).

Technical data is subject to change without notice.

Copyright © 2016 Identiv, Inc. | All rights reserved. This document is Identiv public information.

Revision/Date of Release: 2016-06-23

[identiv.com](http://identiv.com)