



Micro Tag Temed Ltd.



Breakthrough Technology  
for & Product Authentication  
& Anti Counterfeit Protection



Breakthrough in MR Technology



Room size for medical purposes

Half Room size for research purposes

Desk Top size for Materials Laboratories & QA

Hand Held for Anti-counterfeiting purposes



Micro-Tag Temed Ltd

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# Breakthrough Technology for Product Authentication



## Micro-Tag Temed Ltd

is a new entrant into the field of authentication and counterfeiting technologies. The company possesses a high-level R&D expertise in solid-state physics, chemistry, materials science and signals processing, which served as a basis for Micro-Tag scientists to invent and develop a novel and unique authentication technology, now patented world-wide. The company is privately held, having a strategic alliance with Motorola Israel to develop and manufacture Micro-Tag's anti-counterfeiting system. Motorola Israel is also a shareholder and participating in Micro-Tag management.

## The Authentication Technology

developed by Micro-Tag Temed is an invisible, machine-readable class.

It does not belong to any of the current technology families such as magnetic, optical or RFID effects.

The operating principles are based on unique physical effects at the atomic level (similar to effects used in magnetic Resonance imaging), which result in several, very distinctive advantages, over the currently used anti-fraud technologies as presented below.

These, make it extremely resistant to fraud as well as most simple and friendly for application and use, at the same time.

Additionally, these effects allow for novel protection concepts not possible to realize with other anti-fraud technologies.

The system consists of a proprietary and unique tagging material and the prothenticator - a portable dedicated radio transceiver detector for detecting the presence of this taggant. The tagging material is either applied on or embedded into the item to be protected in an invisible mode. It can be easily mixed in printing ink, colors, thread, paper, plastic, etc. Interaction between the tagged material and the prothenticator results in a simple and easy-to-read indication of green and red lights on the prothenticator.

## Applications

The great flexibility of this technology in application modes allows for a very wide variety of anti-fraud protection such as:

- **Brand Protection** (clothing, shoes, CDs, medicines, perfume, auto and aircraft parts, etc.)
- **Document Protection** (identification cards, certificates, passports, bank notes, credit cards, tickets, etc.)
- **Authenticating valuable creative works** (jewelry, artwork, prototypes, etc.)



## & Anti Counterfeit

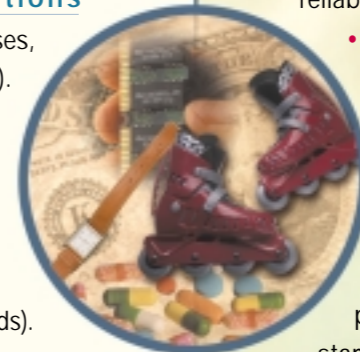
# Protection



## Properties

The following unique properties of Micro-Tag Temed technology make it superior to any other anti-fraud method in use:

- **Highly Resistant to Forgery**  
due to the underlying physical effects used, and their various combinations.
- **Non Magnetic, Non-Optical**  
does not suffer from their inherent sensitivities.
- **Insensitive to Ambient conditions**  
such as magnetic or electrical fields, dirt, greases, temperatures extremes (-100 to 400 Deg. C).
- **Custom "Finger-print" tagging**  
unique tagging material for each customer.
- **Very high operational reliability**  
with extremely low false readings rate.
- **Instantaneous Detection**  
allows for in-motion detection (such as credit cards).
- **Contact-less Reading**  
currently up to 10mm, extendable on demand. Unaffected by various materials in the reading path, such as paper, plastics, wood, ceramics, dirt, greases etc.
- **Yes/No and Code Tagging options**  
expand the level of protection sophistication.
- **Multi-Level Protection feature**  
allows for multiple parameters detection from a single tagging i.e. multiple use of the originally tagged product for up to 3 different modes to foil hostile breaking efforts.
- **Easy Application Modes**  
tagging materials in minute quantities, can be mixed in printing ink, colors, Security Threads, Holograms, into papers, fabrics and plastics during manufacturing, etc.



## Advantages to Customers

The following are the distinctive advantages to the customer, derived from the a.m. unique properties of Micro Tag Temed technology:

- **Customers own private tagging ("Finger print")**  
having the highest security level against imitations and forgery.
- **Reliable authentication system**  
having extremely low false reading rate, thus allowing for reliable court action if needed.
- **Multiple use of originally tagged product**  
(multiple security levels) extending the secure lifetime of the tagged product beyond anything currently available in the market.
- **Flexible and easy mode of application**  
allows for various application modes on or into various product materials using standard processes and standard equipment such as printing, stamping, embedding gluing etc.
- **User Friendly Operation**  
end-user such as P.O.S personnel have clear, simple and unambiguous indication of Red and Green lights (plus any audio effect) thus no need for any training or operating instructions. Taggants comply with EN-71 the European safety standard for children's toys.
- **Combined Protection**  
the total inertness of Micro-Tag's system to other effects allows easily for synergistic combination with any other system magnetic, optical, overt or covert to enhance considerably the protection effects.
- **Price Competitive**  
with currently applied anti-fraud technologies.