

## NEW IMPROVED EM SYSTEMS FROM TAGIT

At the partner meeting in Prague 2018 a number of priorities were set for R&D, in order to find a quantum step forward in performance and capabilities of the Tagit EM Systems. This was required to be able to help develop new niche retail markets around the globe.

These markets included drugstores, cosmetic chains, supermarkets, Ironmongers, garden centers and fishing tackle stores, where the Tagit EM label is the only label that is able to detect on small, metal/foil products, is the only one that be used in all food weigh-scale printers and is the only one that can be detected even when placed inside foil/booster bags.

### NEW REQUIREMENTS REQUESTED:

**The following were the key new points requested at the meeting:**

- To be able to detect at 1.2m aisle width
- To be able to connect to the system, via the internet to allow for remote monitoring, installation, maintenance and data management
- Reduction in false alarms, when the system is close to electronic interference, without the requirement to turn the sensitivity down and reduce detection.
- Improve ease of installation and reduce maintenance costs.



## NEW FEATURES DEVELOPED:

### 1. Turbo-Twin EM Strip Labels

Tagit have developed a new breakthrough “Turbo” label format which has a very high detection signal for its length. The 51x10mm deactivatable clear strip is the shortest and narrowest label on the market, which can detect at close to 1.2m aisle width in the Tagit EM System. These labels work very well on small, metal/foil products and even detect inside foil booster bags.

### 2. Optical Sensors

Tagit have developed a new optical sensor kit which can be retrofitted on existing antenna or ordered with new antenna. These sensors require the beam to be broken by someone walking through the system before the system will alarm. This is especially useful where there is intermittent high electronic noise which can set off the system and would normally require the system to be turned down, therefore reducing the detection performance. This system is therefore very useful in reducing false alarms, whilst optimizing detection performance, essential for a wide aisle system.

### 3. IOT Connectivity

Tagit has developed a new IOT Board that can be retrofitted to existing antenna or supplied with new antenna. This board allows the system to connect by wifi to the internet. Once connected the system can be accessed remotely and the system monitored or tuned by the end user, the partner or Tagit’s technical team. This lowers the cost to install and maintain the system and reduces the number of site visits required. It allows the end user to improve the management and up time of the system and to compare data store by store. The new board also has an external relay and allows you to connect to external CCTV or alarm system.

### 4. Security Guard Alarm Response Management System

As part of our IOT development we were asked to develop a simple system for measuring the response to alarms by the security guards. After the alarm goes off the security guard now has to acknowledge this alarm by touching a small hidden magnetic button and the system measures in the cloud the % of alarms acknowledged within a certain period of time. This helps to improve alarm response and therefore increases the level of system effectiveness.

### 5. AC/DC Adapters

The previous power supply unit had a large footprint, required regular maintenance and was expensive. Tagit now has a range of AC/DC adapters that are smaller, quieter, lower cost and easier to maintain.

## SUMMARY OF BENEFITS:

**The following were the key new points requested at the meeting:**

- 3D EM System with aisle width closer to 1.2m
- Ability to protect all high risk products in a store delivering >ROI
- Ability to detect products even placed inside foil bags
- New lower TCO (total cost of ownership)
- Lower total losses due to less downtime and improved management of systems
- Lower false alarms