

## Floor Guard Hybrid Wi-Fi



### Zero False Alarm\* 58 KHz Acustomagnetic EAS

\*Our patented system algorithm avoids false alarms when walking through the system.

## Floor Guard Hybrid Wi-Fi

Invisible System is visibly better

Your store will impress your customer. And with the WG Wi-Fi Floor Guard Hybrid at your entrance nothing interferes with this impression.

Fully invisible with cutting edge technology. Just the way your store was planned and implemented by your architect.

The Wi-Fi Floor Guard antennas disappear completely in the floor and additional loop antenna integrates into a nonmagnetic door frame or wall.

Compared to other Floor EAS Antennas the invisible Wi-Fi Floor Guard Hybrid lifts the detection area and allows the use of smaller tags.



## Floor Guard Hybrid Wi-Fi applications



Wi-Fi Floor Guard Hybrid is specifically designed for exclusive Fashion, Outdoor, Sport and Luggage stores. Its best used with our small high-performance ferrite tag "Super Pencil" (2.3"), the (1.9") Pencil tag or the Shell tag (2.1"). But because of the improved pick-rate it the system works very well with small adhesive labels.



### Alarm zone:

Type of Tag	Detection Height
Shell, Mid Pencil	3.5 - 4ft
Super Pencil	3.77 - 4.75 ft

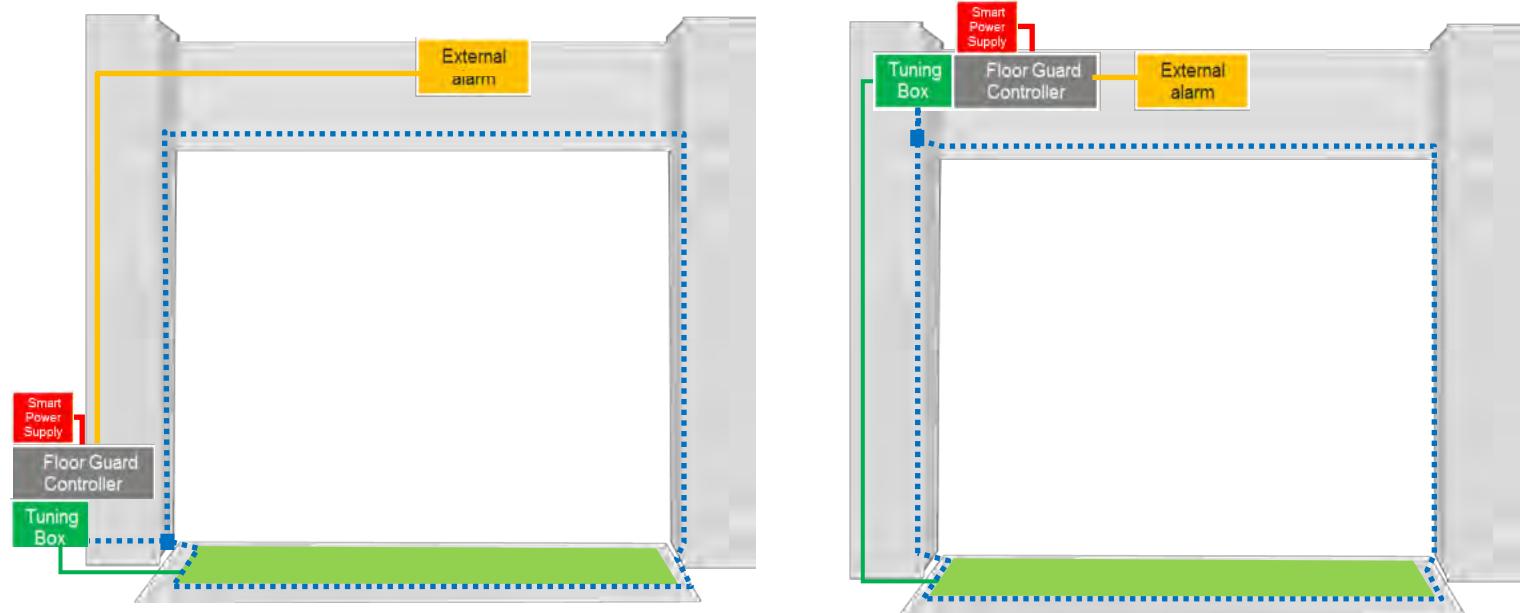
\* Since the influence of metal in the soil can not be determined reliably in advance, we recommend the use of powerful tags like WG Super Pencil WG Pencil or WG Shell tags. Under performing labels will reach lower detection levels. And lower detection height.

To avoid alarms by labels in the close proximity of the antennas, a safety zone with no tags ( about 40-45% of the exit width) should be kept on all sides. AM EAS systems are radio transmission systems on the approved working frequency of 58 KHz. Devices being unsuppressed or not corresponding to recent standards (EN 300330 / EN 301489-3) can cause interference and negatively affect system performance. Changes in the environment and surrounding may require a retuning of any EAS System.

The new Wi-Fi Floor Guard Controller can use the existing Wi-Fi access point or a GSM network provided by WG.

External alarm units can be flush mounted into the store ceiling.

## Floor Guard Hybrid Wi-Fi Installation Description:



The Wi-Fi **Floor Guard Antenna** is installed into a recess floor. Due to the 1inch cable diameter its much easier and more feasible than in previous floor antenna systems. The antenna is cast in thin set and can be covered by non metallic floor materials such as brick, wood, carpet, marble etc. If an entrance-mat is framed by metal this must not form a closed circuit to avoid the effect of a Faraday cage, with negative influences on the signal field. A single cut of 1mm at a hidden position will solve the problem. To any magnetic metal a proximity of about 3.1" - 3.9" is recommended. The floor antenna is connected through a max 20 ft long system cable to a tuning box.

The **Hybrid Loop Antenna** adds another transmitter/receiver field which is processed by the same controller. It is a special seven conductor cable of 8 mm diameter and can be run even inside non magnetic metal frames. Approximately 7 – 12 inches to magnetic metal such as copper board frame construction or regular steel supports shall be maintained. The two ends of the Hybrid loop are connected in a regular PVC connection box and a twisted pair cable of max. 2mm continues to the tuning box. A revision door, close to the connection box is needed for maintenance.

In the **Adapter box** the raw antenna signals are processed and made resistant against interferences. Therefore the shorter this cable is, the better it is. With the 20 ft cable from the floor antenna usually the ceiling can be reached and the box can be located next to the controller. On very wide openings, where the cable length is not sufficient to reach the ceiling, the tuning box may be positioned behind a Revision-door in the wall or in the furniture. The tuning box is connected to the system controller.

The **System controller** processes all transmitter and receiver signals. Usually it is located behind a revision door in the false ceiling or a cabinet. It offers audio-alarm and WiFi connection for remote service. If the alarm volume is too low because the controller is mounted covert, an optional digital remote alarm (audible + optical alarm) unit can be used. Cables between tuning box and controller can be up to 50ft long. The controller is powered by a 24 V low voltage WG Smart Power Supply.

**The ideal position for Controller, Tuning Box and Power supply is in a hatch left or right side of the door. Alternatively a soffit in the ceiling close to the exit can be used.**

The SPS has connection joints for dry contacts to trigger a CCTV-system in case of EAS-alarm or jammer-alarm. Also the alarm volume can be adjusted remotely from the SPS. The exclusive TX-switch is a great support for the store people if they search for labels in the security zone. SPS can be clicked on a standard DIN-rail (Din 46277-3) holder system.

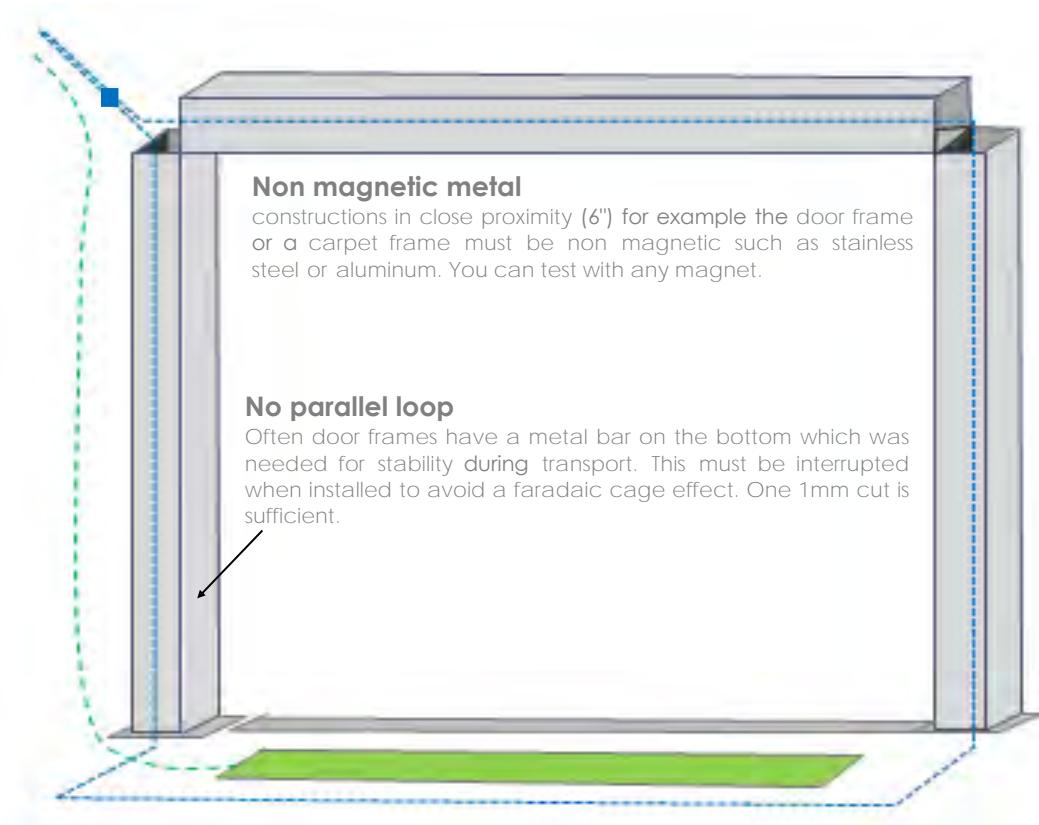
## Floor Guard Hybrid Wi-Fi Specifications for the door frame:

A special configured Hybrid antenne cable is run inside a non magnetic door frame or can be mounted on top of the door frame. Various aesthetic covers are available from WG or can be made by the store fitter.

Every non magnetic material is possible. i.e. Aluminum, stainless steel, bronze, and of course timber, plastic or fiberglass.

To test if the door frame is magnetic (iron or regular steel inside the portal construction), a strong detacher can be used, to sense the magnetic force.

**Important** the door frame does not make a parallel loop. Some doors are delivered with a supporting bar at the bottom, to avoid bending during the transport and mounting. This bar must be cut to avoid the parallel loop and the effect of a Faraday cage.



## Floor Guard Hybrid Wi-Fi Specifications:



System controller with SPS Smart Power supply on the mounting plate



Floor Guard Adapter box

### Options:



Optional external alarm units can be flush mounted into the store ceiling

#### Dimensions

Metal mounting plate:	18 x 13 x 18 inches	1.1lbs
System Controller:	15 x 5.5 x 2.8 inches	5.3lbs
SPS power supply:	4.4 x 5.4 x 3.1 inches	7lbs
Adapter-Box:	9.5 x 7.5 x 3.5 inches	2.5lbs

#### Floor antenna dimensions:

Floor antenna WF FG	60 x 16 x 1.1 inches	11lbs
Hybrid Loop cable	length according project, diameter 1/2 "	

#### Max. Cable length:

Antenna / tuning box:	20ft
Hybrid loop cable to Controller	max 6ft
Tuning box / controller	50ft
Controller to external SPS	250 ft with WG EA-Type 2 cable

#### Power Preparations:

110 V (min. 3x2.5 mm<sup>2</sup>) Fuse 16 A min.. on dedicated circuit, at the same phase (L1 recommended) for all systems and deactivators at the cash desks. Current consumption max. 50 W per system, and 10/120 W (continuous / peak-pulse) per deactivator. Terminal connection or untwist able sockets. Plastic conduits (1") with inserted pull string is required

**External alarm connection** 2 conductor alarm cable or CAT 5/6 cable can be used.

#### Product Codes:

WG WFFG	WG Floor	Guard	antenna*
WFCB	WG Floor	Guard	Controller
WFFG2A6	6ft Floor Guard antenna coil set*		
WG WFFG2A10	10ft Floor Guard antenna coil set*		
WG WFFG2A12	12ft Floor Guard antenna coil set*		

\*includes adapter box dedicated for this configuration.