



### Benefits:

- Combination of loss-prevention and RFID in one system, reducing labeling costs
- Improved store aesthetics, by having an open entrance area in the shop
- Improved customer experience, since tags are very thin and can be embedded in labels (for apparel)
- Shrinkage reduction
- Provides data to detect which products suffer more theft attempts
- Statistics of alarms
- Plug and play installation

### Applications:

- Loss prevention at retail stores
- Loss prevention at warehouses
- Product tracking at backdoors, entrances, corridors, etc.

### Product overview

AdvanSafe is a **loss prevention system** based on RFID UHF. It comprises an antenna with an embedded reader, controller and alarm combining loss-prevention and RFID functions in one system.

AdvanSafe detects the tagged items that pass below the antenna, verify if those items have been paid, and triggers an acoustic and/or visual alarm if any item has not been paid.

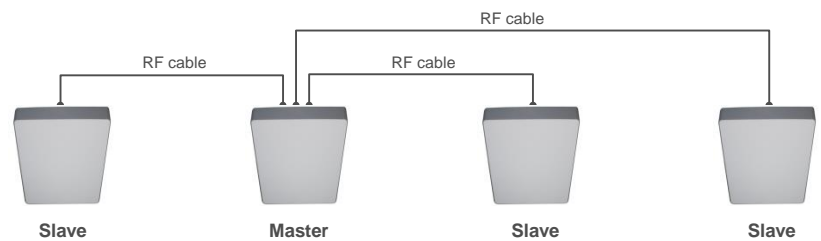
AdvanSafe can use **four configurations** for checking if a tagged item has been paid:

- Checks the EAS bit of NXP chips
- Checks if the EPC code includes a pre-defined pattern that signals that the product has or not been paid
- Checks against the POS database if the product has been paid
- Checks bulk theft: trigger an alarm if a certain number of tags belonging to the same category are read in a certain time period (e.g. a few seconds).

AdvanSafe comprises a **master unit** and several **slave units**:

- The master unit has an integrated reader, a controller, an alarm, a visual alarm indicator and one directive antenna.
- Each slave unit comprises one directive antenna and a visual alarm indicator.

As shown in the following illustration, up to 3 slave units can be connected to one master unit. This reduces costs for stores with wide entrance.

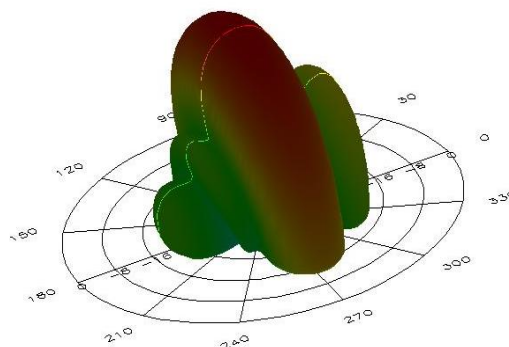


AdvanSafe works with any hard and soft Gen2 RFID UHF tags.

AdvanSafe includes **configurable parameters** for minimizing false alarms

### Radiation pattern

To minimize the detection of products inside the store, AdvanSafe has a radiation diagram wide in one direction and narrow in the other (perpendicular) direction

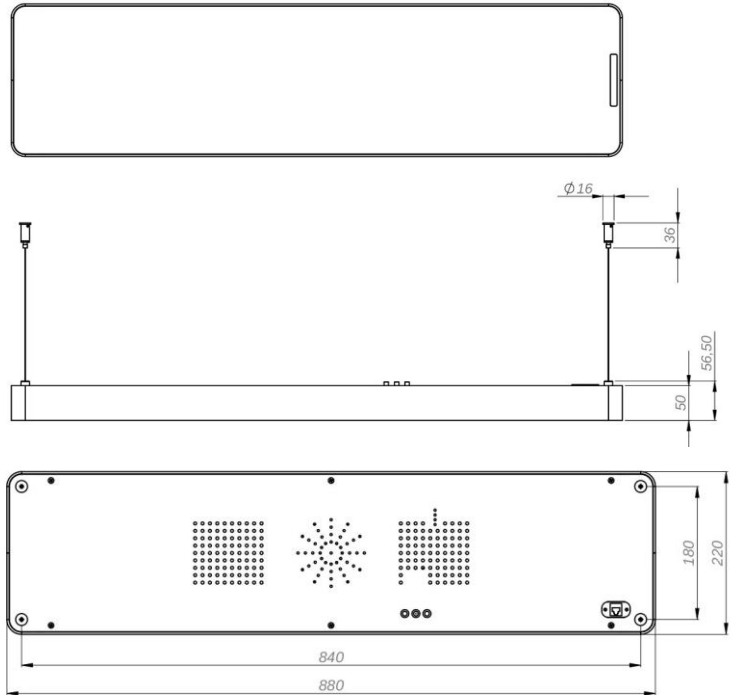




### Specifications

Operating Frequency EU Version	865-868 MHz
Operating Frequency US Version	902- 928 MHz
Detection Height	2 - 3 m (recommended) Maximum: 4 m (Use above heights with caution. Read distance depends highly on tag model and products being used)
Radiation pattern	Fan beam
Beam width	20° / 90°
Polarization	Circular
Alarm Light	Light Emitting Diode (LED)
Alarm Audio	Signal Buzzer
Radiation angle	Fan shape 20° (narrow direction) / 90° (broad direction) -15 dB side lobes
Alarm function Preset	System gives audio and light alarm by detection of any of the EAS supported modes
Power supply	Power over Ethernet Optional: External power supply
Energy Consumption	6 W max., 1,5 W stand by, 0,5 W sleep modus, <5µA power down
Reader Power	max. 31,5 dBm (may be limited to conform to some regulations)
Radiated power	2 W ERP, 3.2 W EIRP
Anticollision	Yes
Interface	Ethernet
Transponder Protocol Standard	EPC Class1 Gen2
Conformity	EN 50364, EN 301 489, EN 302 208 (LBT), EN 300 220
Temperature range	-20°C to +55°C
Dimensions	880 mm x 220 mm x 56 mm 34.6 inches x 8.7 inches x 2.2 inches
Antenna weight	Master unit: 4.300 g Slave unit: 3.900 g
Material Housing	Aluminum and methacrylate
Color	Off white
Human exposure	EN 50364
EMC	EN 301 489, EN 300 220
Air Interface (EU)	EN 302 208 v1.2 (DRM)

### Mechanical specifications



### Product codes for ordering

ADSF	-	o	t	m	-	FF	-	mmm	
									<b>o = overhead</b>
		o							overhead
									<b>t = type</b>
				m					master
				s					slave
									<b>m = mount</b>
				c					Ceiling mount (attached to the ceiling or suspended with a pole, pole not included)
				s					Suspended with metallic wires (included)
									<b>FF = frequency band</b>
						EU			ETSI
						US			FCC
						CH			China
									<b>Model</b>
								100	model number

For example:

- **ADSF-omc-EU-100:**
  - AdvanSafe
  - Overhead
  - Master unit
  - Ceiling mount (attached to the ceiling or suspended with a pole)
  - ETSI frequency band
  - Model 100

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