Technology Solutions for Retail

AdvanGate-100

RFID pedestal for loss prevention



GL Retail & Investments LLC
20801 Biscayne Blvd, Suite 403, Aventura, FL 33180, USA
Phone: +1 (786) 537-3615
david@glretail.us
glretail.us



Benefits:

- Shrinkage reduction
- Combination of loss-prevention and product identification in one system
- The pedestals can be separated up to 4 meters
- Provides data to detect which products suffer more theft attempts
- Very quick detection
- Continuous detection field
- Plug and play installation

Applications:

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

Product overview

AdvanGate-100 is a loss prevention system based on RFID UHF. It comprises a pedestal with two antennas, an embedded reader, controller and alarm combining EAS and RFID functions in one system.

AdvanGate-100 detects the tagged items that pass between the pedestals, verifies if those items have been paid, and triggers an acoustic and/or visual alarm if any item has not been paid.

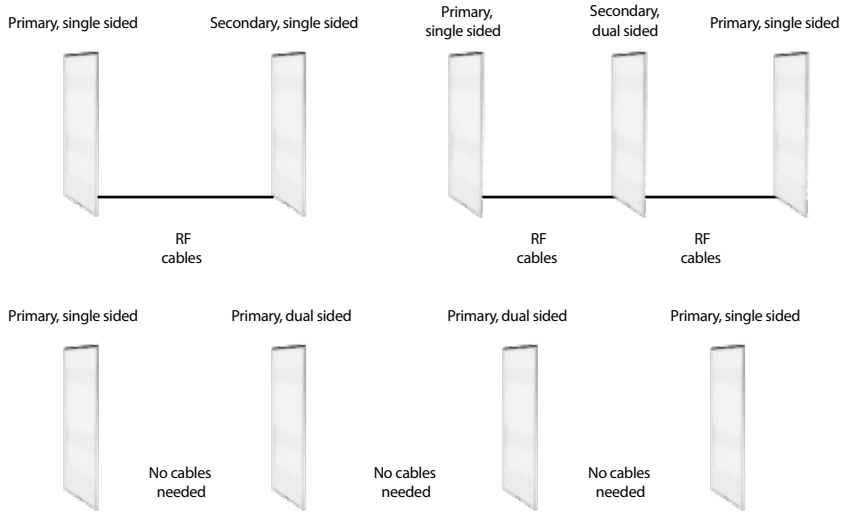
AdvanGate-100 can use four configurations for checking if a tagged item has been paid:

- 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).

AdvanGate-100 comprises primary units and secondary units:

- The primary unit has an integrated reader, a controller, an alarm, a visual alarm indicator and two directive antennas.
- The secondary unit comprises two directive antennas and visual alarm.

As shown in the following illustrations, secondary units can be connected to primary units.



AdvanGate-100 works with any hard and soft Gen2 RFID UHF tags.

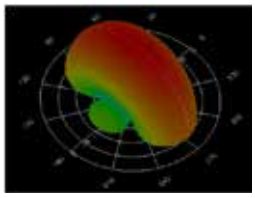
AdvanGate-100 includes configurable parameters for minimizing false alarms.

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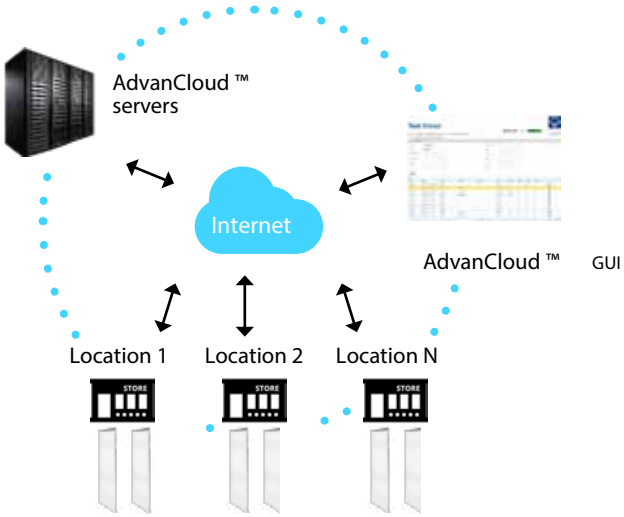
Radiation pattern

To minimize the detection of products inside the store, AdvanGate-100 has a radiation diagram wide in one direction and narrow in the other (perpendicular) direction .



Connection to AdvanCloud

AdvanGate-100 can be optionally connected to AdvanCloud cloud-based software platform.



The products that trigger an alarm can be shown on a smartphone managed by store staff or security staff, in order to:

- Thwart theft attempts
- Register the event: false alarm, thwarted theft, theft



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This information can then be analyzed for business intelligence purposes:

- Theft attempts by day and time of day
- Products that suffer more theft attempts
- Stores with more theft activity
- ...

Optionally, AdvanGate-100 can be connected to a camera and send images of the person passing by when the alarm is triggered, to any smartphone.





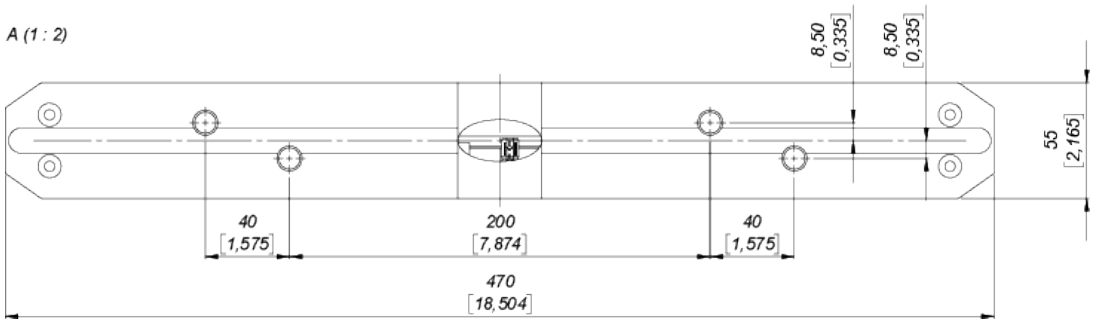


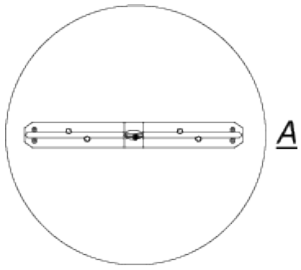
Technical specifications

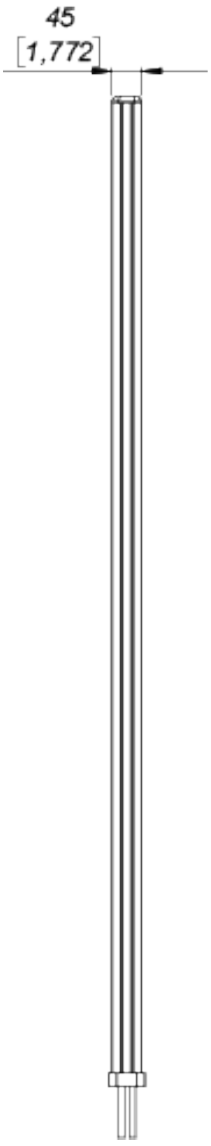
Operating Frequency EU Version	865 to 868 MHz
Operating Frequency US Version	902 to 928 MHz
Separation between pedestals	Up to 3.5 m
Alarm Light	Light Emitting Diode (LED)
Alarm Audio	Signal Buzzer
Radiation angle	Fan shape 40° / 90° -15 dB sidelobes
Alarm function Preset	System gives audio alarm and light by detection of NXP EAS bit ON, or by a specific bit set in the EPC code (can be adjusted to different EAS data models)
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
Radiated power	2 W ERP, 3.2 W EIRP
Anticollision	Yes
Interface	RS485, Ethernet
Transponder Protocol Standard	ISO 18000-6C EPC Class1 Gen2
Conformity	EN 50364, EN 301 489, EN 302 208 (LBT), EN 300 220
Temperature range	-20°C to +55°C
Dimensions	1550 mm x 460 mm x 55 mm
Weight	10,4 kg
Material Housing	Aluminum and plastic
Available colors	Black White
Human exposure	EN 50364
EMC	EN 301 489, EN 300 220
Air Interface (EU)	EN 302 208 v1.2 (DRM)

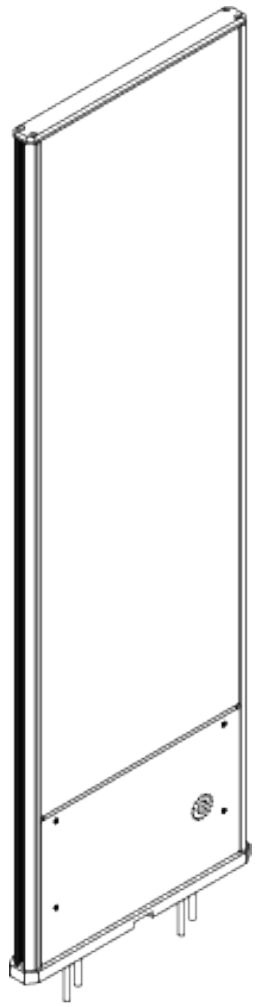
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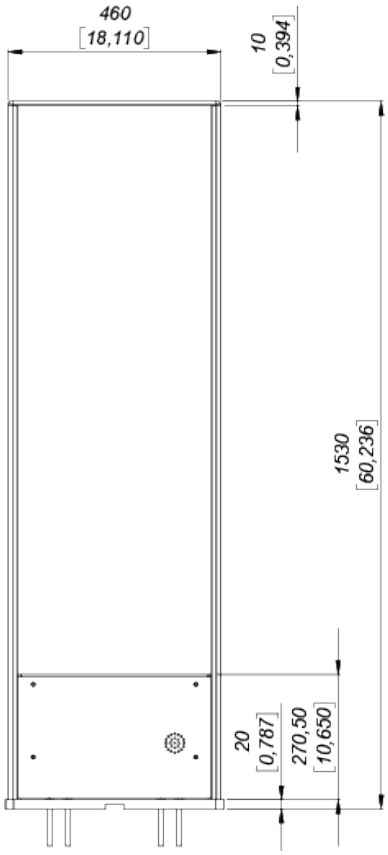
Mechanical specifications











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Product codes for ordering

ADGT	-	U	S	FF	-	aaa	-	CC	-	mmm	
											U = unit
		m									primary
		s									secondary
											S = side
			s								single sided
			d								dual sided
											FF = frequency band
				EU							ETSI
				US							FCC
											aaa = antenna code
						p13					Advantenna-p13
											CC = colour
								WH			white
								BK			black
											mmm = model
										100	model number

Examples:

ADGT-msEU-p13-WH-100:

- AdvanGate
- primary
- single sided
- ETSI frequency band
- p13 antenna
- white colour
- model 100

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