



Assettrack exit prevention system utilizes **passive** RFID to prevent sensitive assets from leaving your facility.

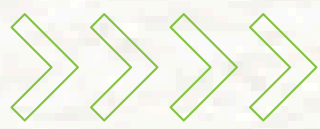
Radio Frequency Identification (RFID) is a wireless system comprised of two components: tags and readers. Assettrack readers contain antennas that emit radio waves and receive signals back from our passive RFID tag.

Assettrack RFID tags are passive, which means they work maintenance-free, without battery power, for many years.

Assettrack delivers a low Total Cost of Ownership (TCO) with no software to install, low cost battery-free key fobs, and no recurring license fees for hardware.

## PASSIVE RFID

RADIO FREQUENCY IDENTIFICATION

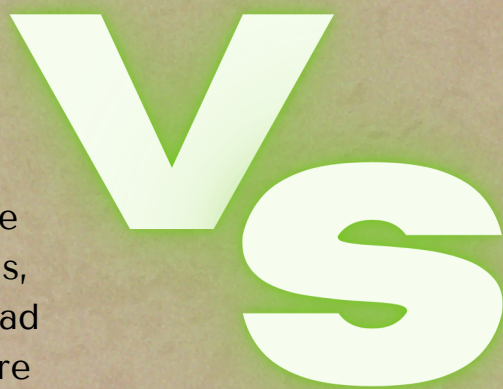


## ADVANTAGES

- Readers - constantly looking for tags and include motion infrared photo eye, reducing false reads. LED lights and horn alert security to a key passing the threshold.
- Power Over Ethernet (POE) for the data and power supply.
- Batteryless tags - can not be "killed" unless destroyed, tags are encoded and customer specific.
- Readers may be added to your network, use a cellular modem, or be stand alone.
- Remote or onsite install is available.
- An optional web portal is available to view and manage tag reads.

## PASSIVE

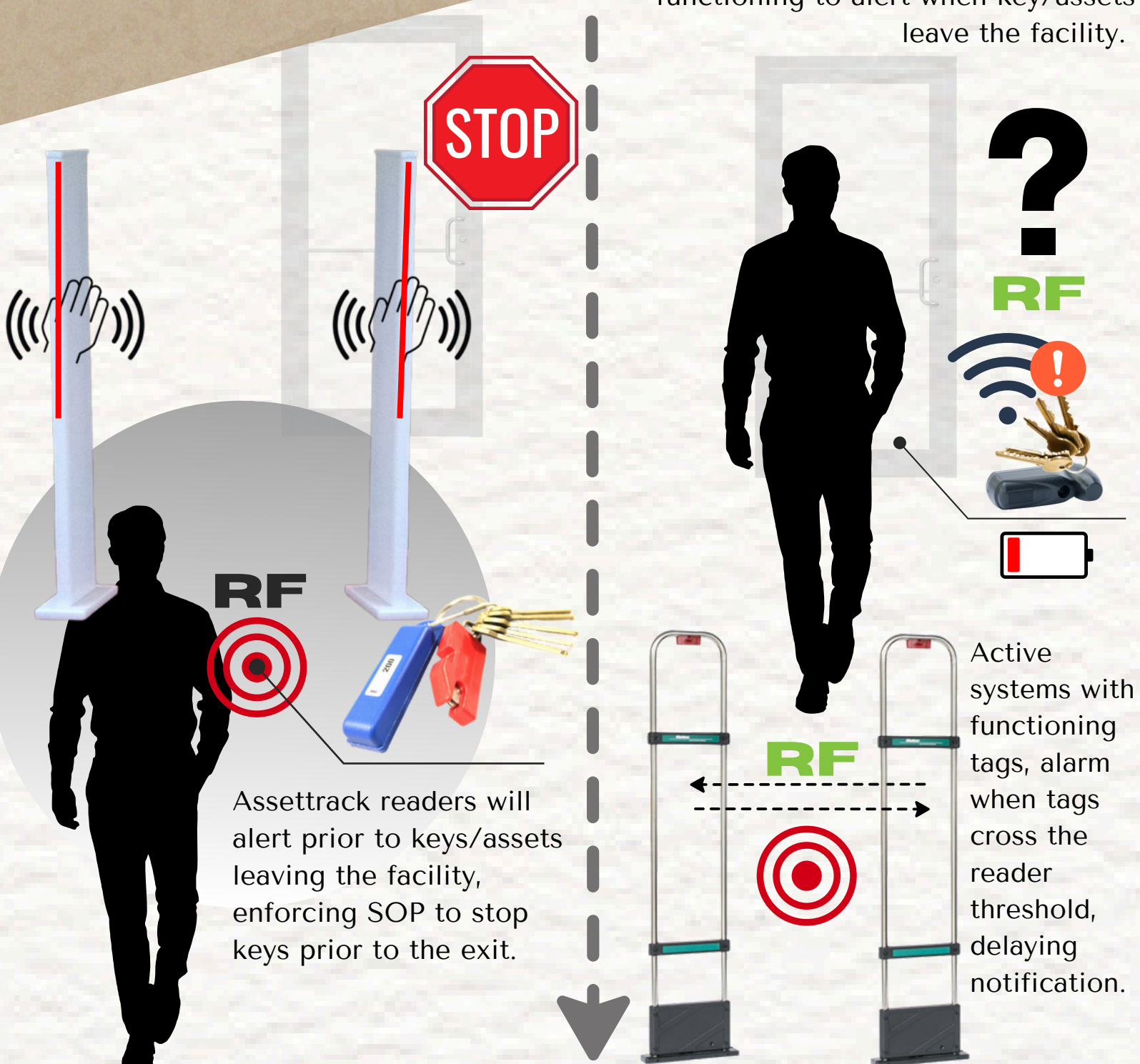
Passive RFID antennas are constantly looking for tags, and alert when a tag is read and seen. Missed reads are reduced because tags do not have an internal power source that can be killed, and reader sensitivity can be adjusted as needed.



## ACTIVE

Active RFID tags depend on an internal battery to actively transmit signals and initiate alerts at defined thresholds. Given the limited 2–3 year battery lifespan, ongoing testing is mandatory to prevent performance degradation. Low battery conditions and fixed read-range limitations increase the risk of missed reads, undermining system reliability.

Active systems rely on the tag to be functioning to alert when key/assets leave the facility.



# OPTIMAL OPERATING ENVIRONMENT & PERFORMANCE CONSIDERATIONS

<b>SYSTEM ACCURACY</b>	The system delivers $\geq 95\%$ accuracy in normal use environments. As with all security systems, accuracy may be impacted by deliberate attempts to defeat or bypass controls.
<b>ELECTRONIC KEY MANAGEMENT PROXIMITY</b>	To ensure optimal reader performance, electronic key management systems should be positioned more than 30 feet from Assettrack exit-prevention readers. Close proximity can result in unintended reads due to RFID overlap.
<b>MITIGATION WHEN RELOCATION ISN'T FEASIBLE</b>	Reader sensitivity can be adjusted to balance detection range and alarm frequency. Reducing sensitivity may decrease unintended reads, but also reduces detection coverage at exit points.
<b>OPERATIONAL CONSISTENCY</b>	Assettrack performs best when supported by a clearly defined and consistently enforced Standard Operating Procedure (SOP). Strong procedural adherence by security personnel significantly enhances system effectiveness.
<b>TAGGED KEYSETS IN DAILY USE</b>	Keysets with RFID tags used during routine operations may be detected when carried within 30 feet of an exit reader. Operational procedures should account for this to prevent unintended alarms.
<b>TRAFFIC PATTERNS NEAR EXITS</b>	Exit locations with routine movement of sensitive keys—such as hallways crossing reader zones or passing photo-eyes—should be evaluated during system design, as frequent traffic may increase the likelihood of unintended activations.

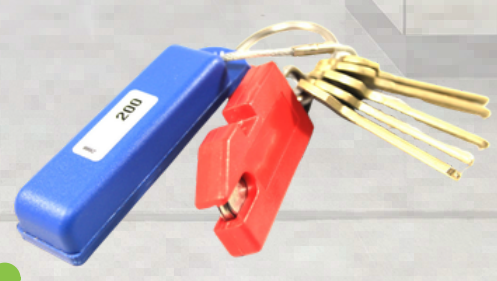
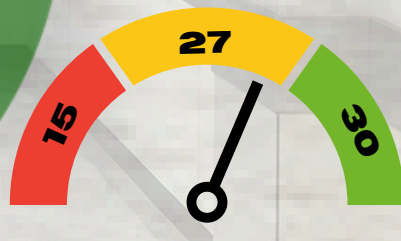
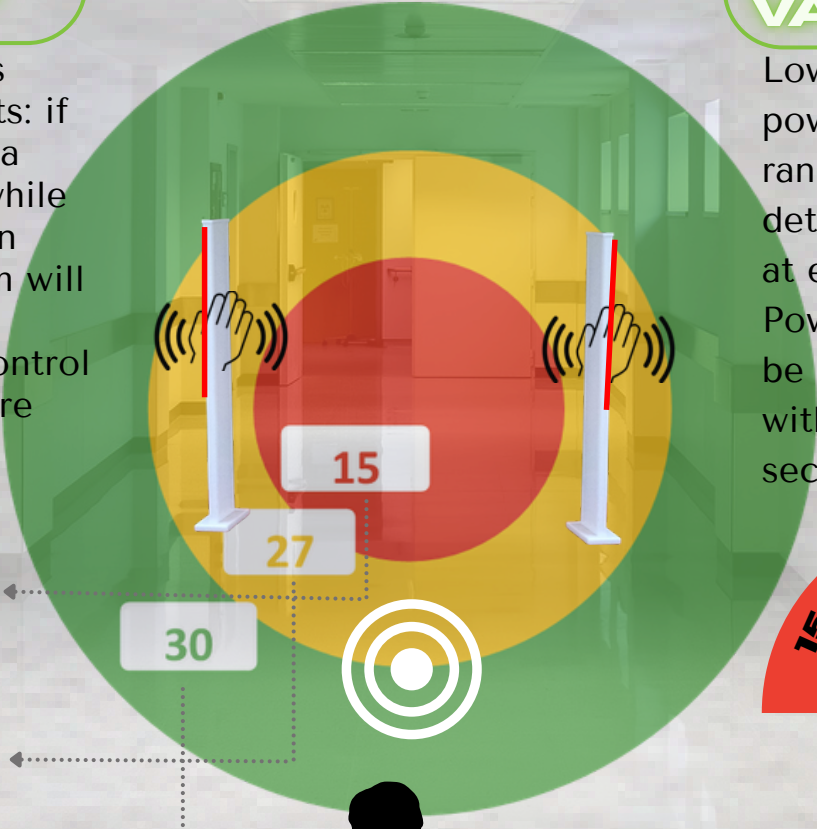
## CHOKES POINT BEHAVIOUR

Assettrack exit readers operate as choke points: if the photo-eye detects a person without a tag while a tagged asset is within RFID range, the system will alarm. This behavior supports strong exit control when traffic patterns are well managed.

## ANTENNA POWER VARIATIONS

Lowering antenna power reduces read range and overall detection effectiveness at exit choke points. Power settings should be selected to align with site layout and security objectives.

- 15-20 ft. radius of coverage  
50% accuracy
- 20-25 ft. radius of coverage  
80% accuracy
- 25-30 ft. radius of coverage  
95% accuracy



## RULE OF 30

- 30 foot radius of coverage
- 30 feet from key cabinet
- 95% accuracy
- Ideal environment