

RFID BASICS

Passive RFID is most commonly used. With passive RFID, the tag ‘sleeps’ until energized by a reader that collects all of the data stored in the tag. The signals can be read from 3 feet to 20 feet depending on the type of tag and the environment it is in. Common, simple examples of passive RFID are car and garage door openers and implanted pet identification chips.

Active RFID tags contain a battery that continually broadcasts a signal or has a battery that can be activated by a transponder. Active RFID has a much further read range (up to 330 feet) so that items can be tracked continuously. Active tags are often used to track things in motion such as shipping containers and rail cars.

Is RFID better than using bar codes?

These are two different technologies and have different applications, which sometimes overlap. The main difference between bar codes and RFID is bar codes require line-of-sight for a scanner to “see” the tag, so a person has to have contact with the item. RFID does not require line of sight, so tags can be read as long as they are within range of a reader.

Bar codes are easily damaged. If a label is dirty, ripped, or falls off there is no way to scan the item. Standard bar codes identify only the manufacturer and product but not, for example, the expiration date of an individual product.