



## **7 FACTORS** to consider when choosing the right RAIN RFID tag

When it comes to evaluating RAIN RFID tags, you'll find that each has specific attributes that define its best uses and limitations physically, environmentally, and mechanically. From tag size to required read range, consider these factors when deciding which type of tag best fits your application and system requirements.

Frequency Range

Tags should be tuned to the correct frequency range for the country in which they are deployed. If the reader is transmitting on one band and attempts to read tags tuned to another band, the tags will not respond.





If an application must endure extreme temperatures, water, dirt, or an intensive laundering process, it is essential to select a tag that is built to withstand such conditions. There are many



Each tag is designed to be applied to a specific set of materials. RAIN RFID tags generally work well on materials like plastic, wood, or cardboard, but only certain tags can adhere to complex materials such as metal or glass.



The material and shape of the item to be tagged are two of the most important aspects to consider when determining the appropriate attachment method. For instance, some tags work well with all-purpose adhesives and epoxy, while other tags need to be adhered with rivets, screws, or welding equipment.



Tag memory size matters for encoding data on the tag. Consider specifically, the information that should be encoded on the tag and the associated data that can be stored on the central database. Memory type also matters depending on the project since some industries have specific EPC requirements for the tag data. specialty RFID tags built to survive extreme conditions of all sorts.

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Tags are manufactured in different sizes and shapes to better accommodate for unique applications. Depending on the specific application and the amount of space and location on the object to be tagged, size can play a critical role in determining the ideal tag.



The tag read range is a crucial component of almost all RAIN RFID systems. Factors like antenna gain, reader transmit power, and tag orientation need to be considered when determining the optimal range for the application.

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Impinj wirelessly connects billions of everyday items such as apparel, medical supplies, and automobile parts to consumer and business applications such as inventory management, patient safety, and asset tracking. The Impinj platform uses RAIN RFID to deliver timely information about these items to the digital world, thereby enabling the Internet of Things.

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