

BARCODE

VS

RFID

UNDERSTANDING THE DIFFERENCES

BARCODE VS RFID

ASSET TRACKING DISTANCE

15 ft

The barcode should be in line of sight

Up to 250 ft

The RFID tags need not be in line of sight

ASSET TRACKING SPEED

Tracking rate is one barcode at a time

Tracking rate can be as high as 35 RFID labels simultaneously

MATERIAL RESTRICTIONS



None – Barcode works on almost all materials



RFID technology can be restrictive in metals and sometimes in liquids too

ASSET TRACKING ACCURACY

HIGH

HIGH

HUMAN INTERVENTION

You have to print labels frequently and they are labour-intensive.

Once set-up generally do not require any intervention

LEVEL OF INFORMATION

They just have basic product and manufacturer name

Can carry large amount of data – service history, order history etc

SECURITY

Less secure than RFID as barcodes can easily be reproduced

Highly secure with comprehensive password and encryption features

DURABILITY

Barcodes need to be readable by scanner so are on the outside of the asset, hence can be easily damaged.

RFID Tags are difficult to damage and can be within an asset so can be read in adverse environments

COSTS

Fundamentally involves barcode labels, printer and scanner, cheaper than RFID

RFID is an expensive technology due to chip and wave technology.