

How Do Magnetic Card Readers Work?

Magnetic card readers use electromagnetic technology to decipher the various tracks contained on the magnetic strip found on the back of credit, debit, and gift cards to provide your customer and banking information to complete point of sale transactions.

Which Magnetic Card Reader Do I Buy?

Important Considerations:

Readability:

Magnetic card readers are designed for either high volume or standard volume use.

High volume readers are equipped with components for a longer read life and are usually constructed of metal. They have a longer reading channel, which ensures a successful scan of the card on the first pass. High volume readers also have a higher-volume price tag, but are worth the money for dependability and performance.

Recommended for: Retail environments with very high transaction volumes (think chain store)

Model to Try: [ID Tech EasyMag Swipe](#)

Standard volume readers are fine quality card readers for normal point of sale operations.

These units may occasionally require an additional pass to read the card and have a shorter reading life than high volume models, but are very reliable, economical, and a popular choice for most POS systems.

Recommended for: Low to normal volume retail or restaurant operations.

Model to Try: [ID Tech MiniMag Swipe](#)

Durability:

Consider environmental factors and frequency of use when selecting a magnetic card reader. Is your POS counter in a climate-controlled area or outdoors? Is it located in an unsecured self-service kiosk or only operated by employees? Outdoor or public use warrants a metal constructed and/or weatherproof card reader.

Model to Try: [ID Tech Omni Heavy Duty](#)

Interface:

Magnetic card readers are available with three different interface options: USB, PS/2 Keyboard Wedge, and Serial. The two most commonly used, USB and PS/2, send card data to the computer as if it was typed on a keyboard. Card readers connected via serial interfaces may require special software to interpret the data from the card reader. Most models are available with a variety of interface choices — you will need to select the part number with the proper interface for your POS set up.

Track Numbers:

Magnetic stripes on the back of cards can contain up to three different “tracks” of programmed information. The number of tracks used on a card depend on the type of card. Standard credit cards utilize Track 1 and Track 2. **Track 3 may be used by other types of cards.** Because magnetic card readers come in two-track versions and three-track versions, it is important to verify whether or not information is contained on Track 3 of any additional card types you wish to read.

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Important Considerations (continued):

Media Types:

All magnetic card units read magnetic stripes, but some manufacturers offer combination models that also feature the ability to read barcodes. There are also slot card readers designed only to read barcodes. Some examples of cards media types that may use barcodes include membership cards, and employee or student ID cards.

Models to Try:

- [Unitech MS146](#) (reads barcodes only)
- [IDTech Omni Heavy Duty](#) (reads both magnetic stripes and barcodes)

Programmability:

While all card readers are designed to read Track 1 and Track 2, or Tracks 1, 2, and 3 data right out of the box, most card readers can actually be programmed to divide, rearrange, edit, and validate fields of magnetic card data. Programming your card reader to change the way the data is viewed is important when running software that requires delivery of the data in a certain format. Keep in mind that using programming functionality is an advanced feature and may require manufacturer support.

If you have any questions regarding magnetic card readers, barcode slot readers, or combination readers, feel free to call our trained sales staff at 1-800-903-6571, or [shop card readers now](#).