

SP35 Supplies and Parts

The printer uses supplies, similar to a paper printer. The following describes how the supplies are similar and different.

- Where a paper printer uses paper that you can purchase at an office supply store, the SP35 printer uses cards that you purchase from a dealer.
- Similar to paper, there are different types of cards. For cards, you can use magnetic stripe cards, cards with a signature panel, or cards with a smart card feature. You can also use card with more than one special feature.
- Also similar to paper, cards can be different quality. High quality cards are cleaner, smoother, more even, and more white. They result in better printer operation and the appearance of the printed cards is more pleasing.
- Paper printers can use an ink cartridge or a toner cartridge. Older dot-matrix printers use a print ribbon. The SP35 printer uses a print ribbon. The print ribbon can be a single color (monochrome) like a toner cartridge, or the print ribbon can have color panels, similar to a color ink jet cartridge. For the SP35 printer, one color ribbon has panel sets (y=yellow, m=magenta, c=cyan, k=black, and t=topcoat), which is different from many ink cartridges.
- Paper printers that use ink can have pages that are damaged by water or other contaminants. The color (YMC) applied to the card from the print ribbon can be damaged by ultraviolet light, solvents, and wear. To protect the printed card, the SP35 applies a topcoat (T panel) after printing the color and K panels. This protection is not available for paper pages.
- Some paper printers include cleaning tools, and recommend using them when you change the toner cartridge. The SP35 printer also uses cleaning supplies: a cleaning card that runs through the printer and a cleaning roller that stays in the printer. With the SP35 printer, you can also use a cleaning pen.
- Paper printers often have the ink or toner in a cartridge that also functions in applying the image to paper. The SP35 printer uses a printhead cartridge, which is separate from the print ribbon. It is different from paper printers in this way. The printhead cartridge is replaceable.

This section describes the supplies you use with the SP35 printer. It also describes replacement parts that you might want to order.

Supplies and cards

This appendix describes specifications, part numbers, and handling for supplies used with the Datacard® SP35 printer. It includes:

- Print ribbons
- Cards to print
- Cleaning supplies, including cleaning cards, replaceable cleaning roller sleeve, and cleaning pen

Print ribbon is used to personalize cards. This section describes Datacard®-recommended personalization supplies for the Datacard® SP35 printer and how to store them.

Print ribbons

Ribbon kits contain a roll of print ribbon, a cleaning card, and a replaceable cleaning sleeve. Datacard recommends that you run a cleaning card and replace the cleaning sleeve each time you change the print ribbon.

Color print ribbon

Color print ribbon is available as part of the YMCKT Color Ribbon Kit, part number 552854-504. A roll of ribbon prints up to 500 images. Datacard color print ribbon for SP series printers uses Advanced Imaging Technology™.

The SP35 card printer features Datacard proprietary ribbons designed specifically for the SP35 card printer. When the printer recognizes that a Datacard ribbon is installed, all enhanced product features are enabled and successful card printing can begin. The printer will only print color images when Datacard proprietary color ribbons are installed. Datacard is your exclusive source for proprietary ribbons for the SP35 card printer.

Monochrome and Topcoat ribbon

Ribbon with alternating Monochrome (K) and Topcoat (T) panels is available as part of the KT Color Ribbon Kit, part number 552854-509. A roll of ribbon prints up to 1000 images.

Monochrome print ribbon

Several colors of monochrome (single-color) print ribbon area available for the SP35 printer. A roll of ribbon prints up to 1500 images (if ribbon-saver is not used).

Available colors include:

Color	Part number
Black	552954-501
Dark Blue	552954-502
White	552954-503
Red	552954-504
Silver	552954-507
Scratch-off	552954-513

When you use a monochrome-only print ribbon, use a printhead cartridge designed for monochrome printing for optimum results. When you use a color ribbon that includes a K (monochrome or black) panel, use a color printhead cartridge. See [Printhead cartridge](#) for details.

Supply roll storage

Follow these guidelines when storing supply rolls:

- The print ribbon maintains its quality for about a year. For optimal card quality, purchase and store quantities that you can use up in less than a year.
- The print ribbon and card stock might require secure storage and tracking. Follow your policy for storing and tracking the supplies used to make cards.
- Choose a location away from direct sunlight, with a temperature between 32° F and 77° F or between 0°C and 25° C. A humidity range from 40% to 60% (non-condensing) is recommended.
- Supply rolls should be at room temperature when they are installed in the printer and used. If supplies are stored in a cooler environment than the printer, allow supplies to reach room temperature before using.
- If the printer will not be used for an extended period of time, remove supplies from the printer and store them with new supplies.

Cards

This section describes specifications and quality guidelines for card stock to use with the SP35 printer. It also describes the environmental specifications for storage of card stock.

For best results with the SP35 printer, use high-quality card stock that meets the specifications and recommendations described in this section.

Card size

Use CR-80 size cards with the following nominal dimensions:

Length	3.37 inches	85.60 mm
Width	2.125 inches	53.98 mm
Thickness with smart card chip	0.027 to 0.040 inches	0.685 to 1.016 mm
Thickness (all other cards)	0.020 to 0.050 inches	0.508 to 1.27 mm

Actual card thickness can vary by up to ten percent from the sizes listed. Smart card chips can be raised slightly from the printing surface.

Card bow must be less than the thickness of the card.



Card material

Use cards made of the following types of material:

- Glossy PVC surface, either 100% PVC cards or composite cards with a PVC surface.
- If you use both a topcoat station and an overlay station, composite cards with a polyester core and PVC surface are recommended.
- Cards with a magnetic stripe on one side of the card.
- Cards with a smart card chip on the top of the card. Depending on the module installed in the printer, contact-type, contactless, or both types of smart card chips can be programmed.

Embossed cards cannot be processed in the SP35 printer.

StickICards

StickICards™, part number 597640-001, can be used. StickICards are used to make personalized cards that can be adhered to proximity cards when the card surface is not flat enough to print. The printing surface of the StickICard (white side) meets the material requirements for use in the printer.

When using StickICards, follow these guidelines:

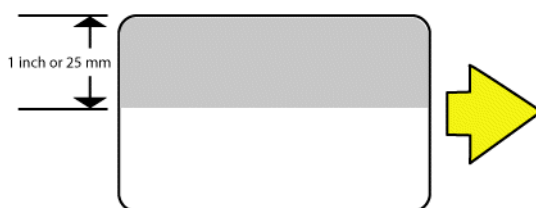
- Store cards in a cool place (such as a refrigerator) to avoid adhesive migration.
- Fan cards before loading them in the card cartridge.
- Clean the printer's card tracks to remove any adhesive residue. Use the printhead cleaning pen or isopropanol and a swab to remove the residue.
- Use a print margin of 0.1 or 0.05 inch with StickICards.

Contactless smart cards

Contactless smart cards are also called RF (radio frequency) cards and proximity cards. Contactless smart cards can have an irregular surface where the internal components of the card are located. You might modify the card design to avoid printing photos or other images over the internal components of the card.

Pre-punched cards

Datacard recommends that you punch cards after printing them. However, you can use pre-punched cards with the SP35 printer as long as the hole is free of raised areas or burrs. In the following illustration, the gray area shows where punched areas are allowed.



- The cards can only have a punched area within 1.0 in (25.4 mm) of the left-hand edge, as the cards are loaded in the card cartridge. (This dimension includes tolerance.)
- If the card has a magnetic stripe, the card cannot be punched anywhere in the stripe.

New cards preferred

The SP35 printer is designed to print on new card stock. If you print on cards twice, be careful to avoid getting dirt, fingerprints, or other contamination on cards before the second printing. Printing on cards that

have been issued might introduce substances that interfere with card printing or damage the printer. See [Troubleshooting](#) to address card appearance problems with pre-printed cards.

If a previously printed card has been printed with topcoat, the card cannot be printed a second time.

Card quality guidelines

Your cards must meet the following card quality guidelines for the printer to print high quality graphics on them successfully.

Card surface

- The card must be free of irregularities such as particles embedded in the surface. The particle detector attempts to detect and reject cards with particles.
- The card surface must be smooth and even. Surface irregularities can cause loss of contact, resulting in printing voids.
- The printing surface must be glossy. It cannot have a matte finish (see other sections in this appendix for more information).
- Card edges must be free of raised burrs, which can cause unprinted areas on cards (printing voids). This is especially true when printing Edge-to-Edge.

Card handling

These guidelines apply to unprinted cards. Any debris or particles on an unprinted card's surface can reduce print quality and damage the printhead. Grease or oils, such as oils from your fingers, also reduce print quality.

- Keep cards completely clean.
- Do not touch the print surface of a card with your fingers or hands.
- Do not use a rubber band to bind blank cards together.
- If you drop a card on the floor, do not insert it into the Select printer.

Card storage

These guidelines apply to both printed and unprinted cards.

- Cards must be stacked so that they will not shift and rub against each other.
- When storing cards, make sure that no two cards contain images or blocks of color that will come in contact with each other.
- Make sure that the magnetic stripe on one card does not come in contact with the magnetic stripe on another card.
- Make sure that cards with magnetic stripes are stored away from magnets and other magnetic objects.

Card storage specifications

The cards should be stored in a cool, dry, and dark place. Excessive light can cause yellowing of cards on exposed edges. Keep cards in their original packaging.

Cards should be at room temperature when they are installed in the printer and used. If cards are stored in a cooler environment than the printer, allow them to reach room temperature before using.

Cleaning supplies

The printer uses the following cleaning supplies.

- Printer cleaning cards
- Replaceable cleaning sleeves
- Printhead cleaning pen

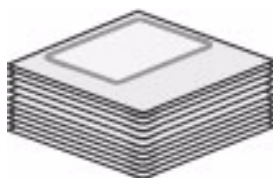
The print ribbon kit includes a cleaning card and a replaceable cleaning sleeve. Datacard recommends that you keep additional cleaning supplies on hand to address unusual situations.

You can order:

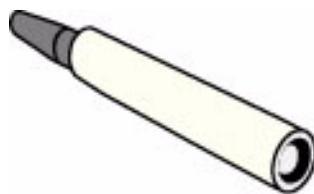
- A package of 5 replaceable cleaning sleeves, part number is 549716-001.



- A package of 10 cleaning cards, part number is 552141-002.



- A cleaning pen, part number 557492-001, which can be used eight times, to clean the printhead or other internal parts of the printer



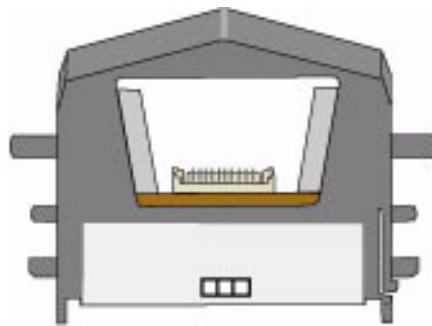
Printer components

The printer has a replaceable printhead cartridge. You can also order additional or replacement parts. This section describes the printer parts you can order.

Printhead cartridge

The printer has a replaceable printhead cartridge. The printhead is subject to wear or damage and has a direct impact on print quality. The silver label on the printhead shows the printhead type. The following printheads are available.

Printhead type	Printhead label	Part number
Full color	YMC	551439-999
Monochrome	K	551439-998



Do not touch the printing edge of the printhead in the printhead cartridge. If you do, use the cleaning pen to clean it. See [Cleaning the printhead](#) for steps to follow.

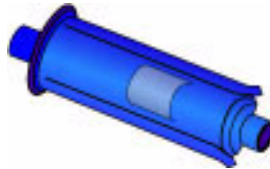
Print ribbon cartridge

You can purchase an additional print ribbon cartridge. The print ribbon cartridge is part number 551516-999.



Cleaning roller spindle

The cleaning roller spindle holds the replaceable cleaning sleeve. The part number is 549130-001.



USB data cable

The SP35 printer uses a data cable to connect the printer to the PC. The USB cable must be a Type CM 30V, up to a maximum of 2 meters long. The part number is 807614-001.



Power supply

The printer uses a power supply rated at 100-240 VAC, 50-60 Hz, 1.0 amp. The power supply is part number



Power cable

The printer uses one of the following power cords:

- U.S. power cable (part number 556766-010)



- European power cable (part number 806842-001)
- Australian power cable (part number 806842-002)
- United Kingdom power cable (part number 806842-003)
- Danish power cable (part number 806842-004)
- Indian power cable (part number 806842-005)
- Israeli power cable (part number 806842-006)
- Italian power cable (part number 806842-007)
- Swiss power cable (part number 806842-008)
- Japanese power cable (part number 806842-009)

Smart card cable

If the printer has one or more smart card modules, it uses a smart card cable to connect the smart card port and the PC. Use a cable that matches the port installed in the printer. At the time of publication, the following smart card modules were available:

Module	Type of port	Part number of cable
SC430 (PCSC, contacted)	USB	807614-001
SC680 (Mifare, contactless)	Serial	805815-001
SC4/6 (PCSC and Mifare)	USB and Serial	807614-001 and 805815-001
SCCS (Contact Station)	Serial	805815-001

Serial cable

The smart card serial cable must be a shielded DB9 serial cable, up to 3 meters long maximum. The smart card serial cable is part number 805815-001.



USB cable

See [USB data cable](#) for USB cable details.

Related publications

This section describes publications for the printer.

- Printer Guide for the Datacard SP35 Printer, Part Number 553772-001

- This manual provides basic information about using the printer and driver, and how to care for the printer. It also includes the warranty statement and the installation report.
- SP35 Installation Map, Part Number 539252-001
 - This sheet provides a streamlined installation process for typical one-printer-to-a-PC installation. It also shows supplies and equipment shipped with the printer.
- SP35 Info Central, Part Number 539289-001
 - The online e-Guide provides advanced information, such as how to connect two printers to one PC. Info Central collects all the online information under one desktop icon. It can be download from www.datacard.com or installed from the User Information area of the driver CD-ROM.
- SmartDriver API Software Developer's Manual, Part Number 526720-001
 - This manual is part of the SmartDriver Software Developer's Kit (557214-001) and provides information to programmers who are developing applications to print to Datacard printers, including the SP35 printer. This manual is available only as part of the kit.
- SP35 Service Information CD, Part Number 539291-001
 - This CD provides information to service providers who maintain or repair the SP35 printer.