The innovation
in card mailing
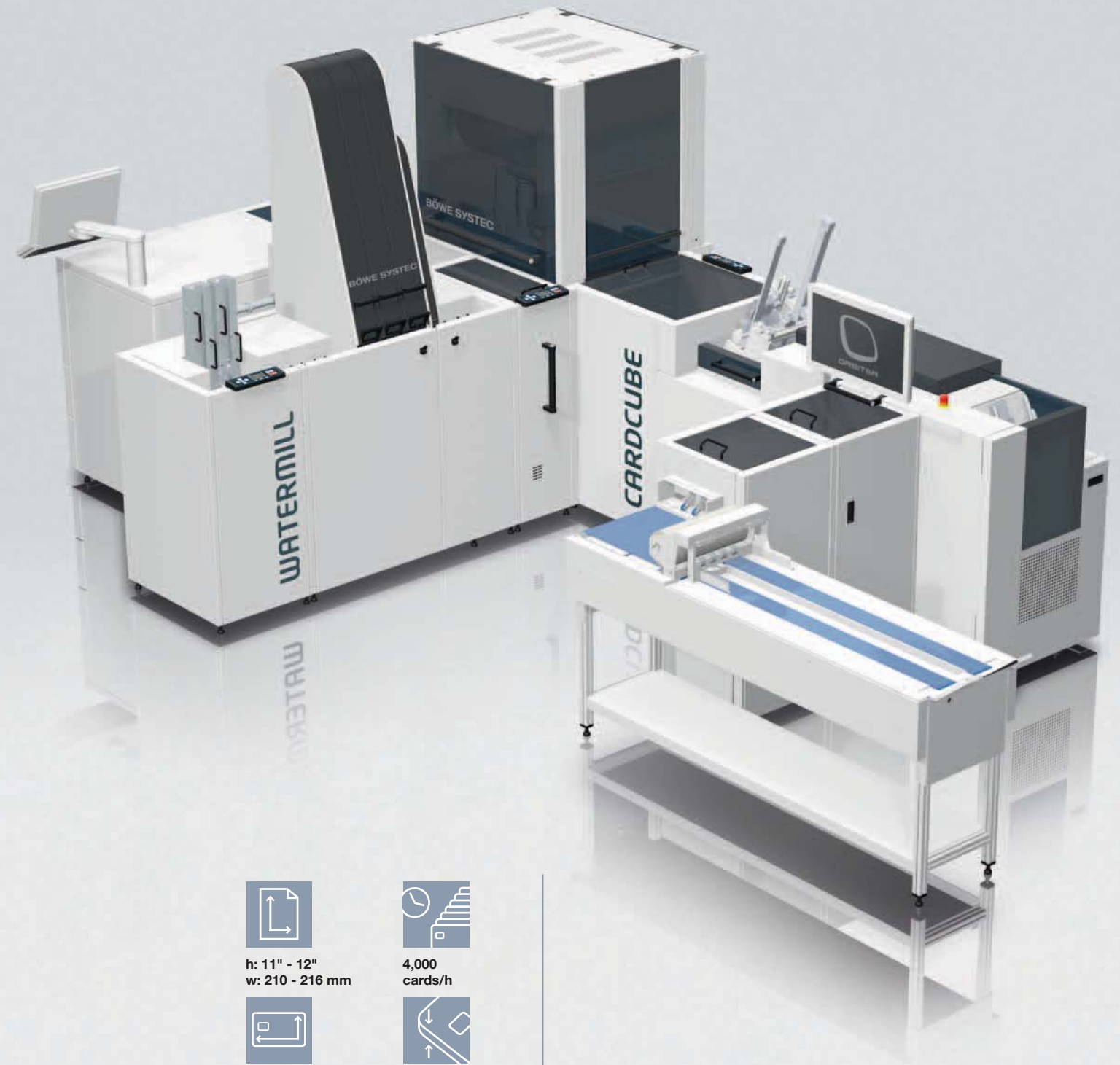
h: 11" - 12"
w: 210 - 216 mm

4,000
cards/h

85.60 x 53.98 mm
3 3/8" x 2 1/8"

1.2 mm/0.05"

0 - 4 cards
per document

clever
features

CARDCUBE

BÖWE SYSTEC
2013/2014

Inserting

**Card Logistics
and Mailing**

Options for Inserting
and Card Mailing

Self-Mailing

Sorting

Software

Service

Smart solutions
for 100 percent integrity

BÖWE SYSTEC card mailing systems are well-known for their indisputable reliability when it comes to processing personalized plastic cards. With the new card mailing system Cardcube, another innovative product has been added to the current portfolio. With a performance of up to 4,000 cards per hour, Cardcube is ideally suited for medium-sized production volumes. This compact system offers innovative and smart solutions to face existing and new challenges in card processing on the smallest possible footprint. Cardcube utilizes a newly designed folding unit that prevents imprints of an embossed card appearing on the document and comes with a special feature: A robot attaches up to four plastic cards in any orientation – thus providing new levels of flexibility in card application. Cardcube shares the same 100 percent integrity throughout its processes as the established card mailing system Pace.
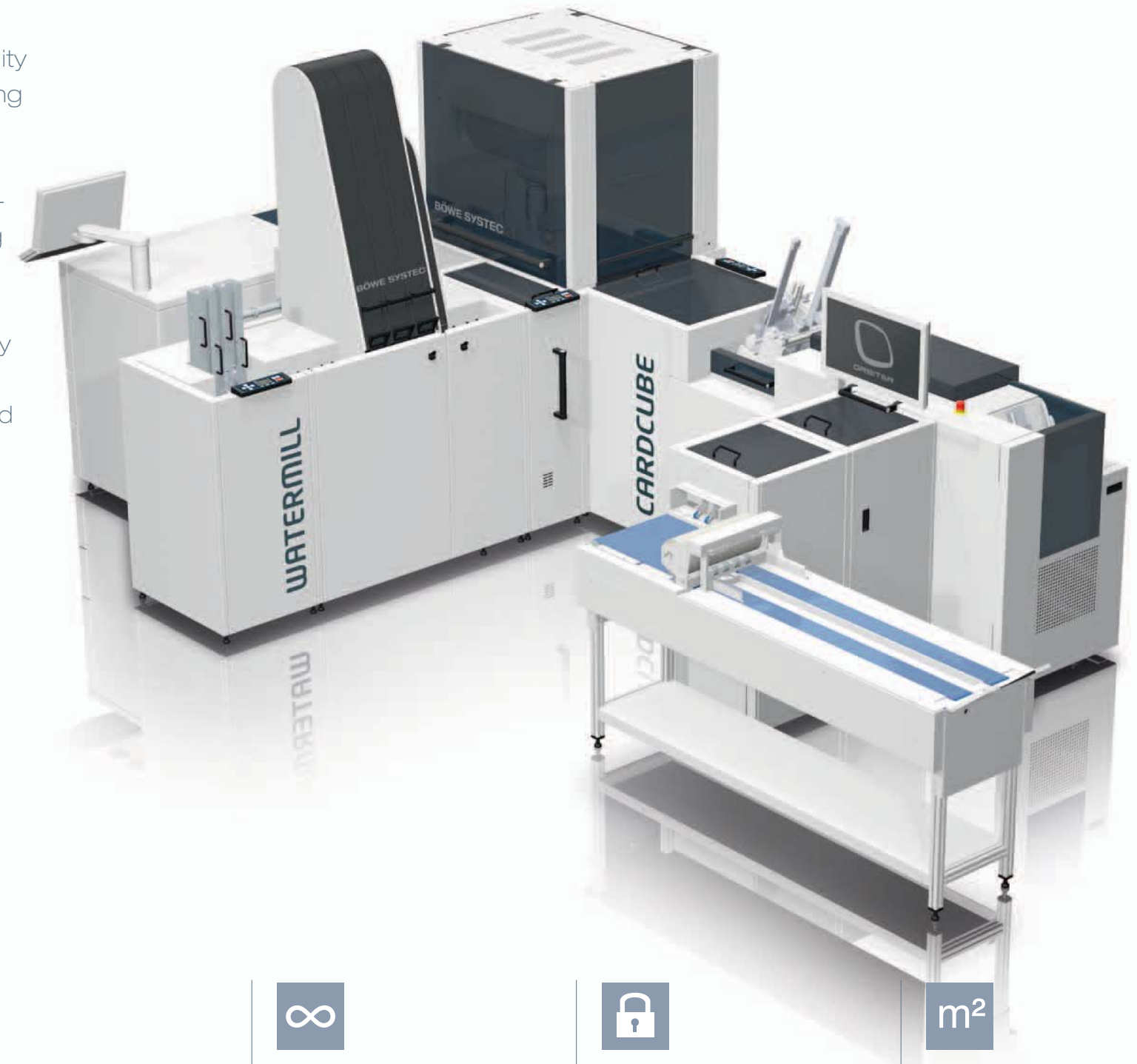
Cardcube offers a professional solution for every **card mailing application**

Enables **White Paper Factory solution** for card mailing through optional integration of monochrome or color printer

Flexible attaching station and new flap folding unit for **more productivity** in card mailing

The card channel and the **robot attaching station** form Cardcube's technology center

Intelligent reading technology and Watermill card storage unit for the **highest integrity**

The **compact system** fits into the smallest facilities

Flexible solutions
for individual needs

Processing up to 4,000 cards per hour, Cardcube is the ideal system for medium sized production volumes. Its modular design allows for customized solutions to meet individual requirements in card mailing – from basic to the most complex applications, with 100 percent integrity.

Highly flexible infeed:

› Multi-channel ready

› Cut-sheet processing

› Processing of pre-printed documents or optional integration of a monochrome or color printer

› Assembling before card attaching and folding (up to two sheets)
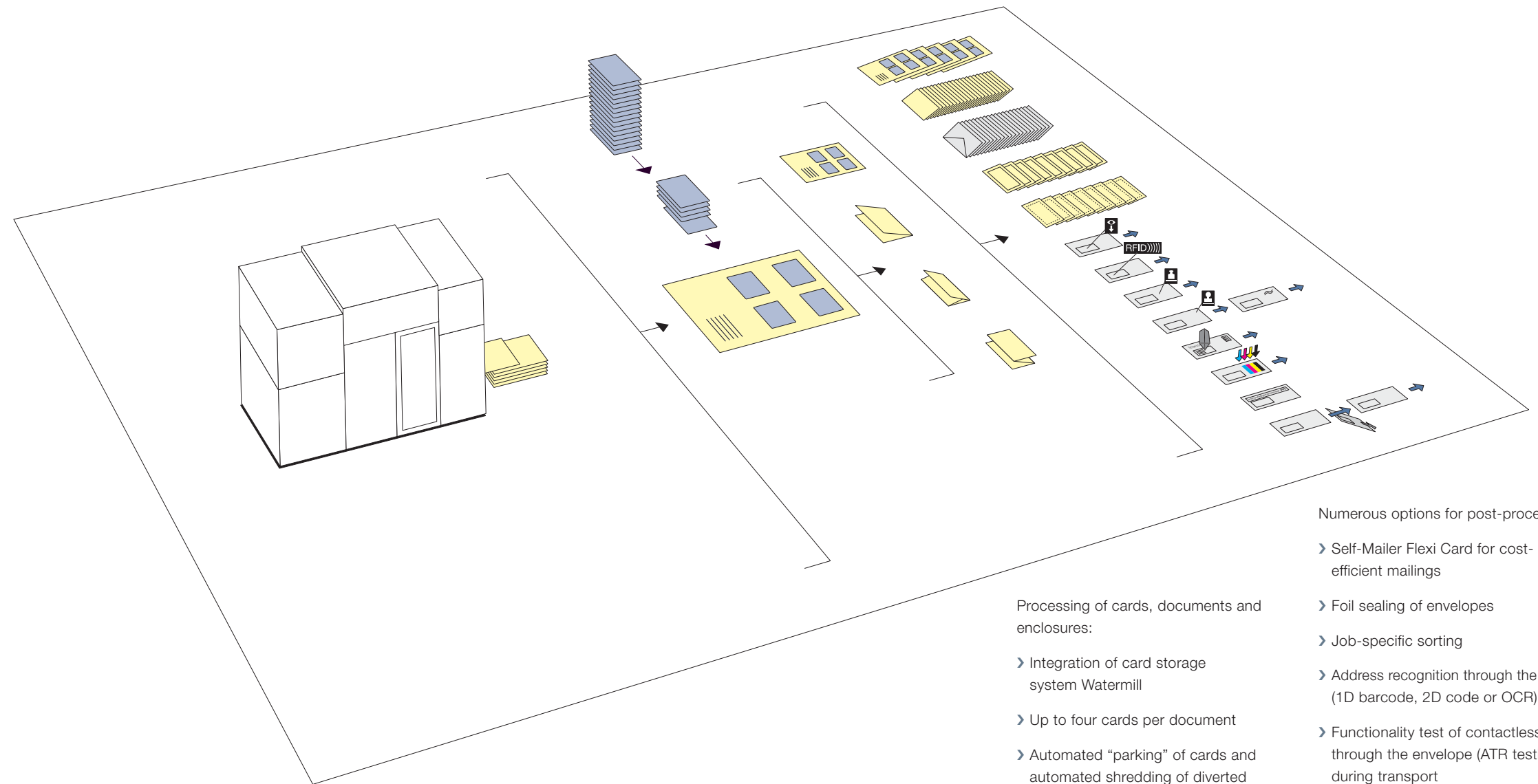
Processing of cards, documents and enclosures:

› Integration of card storage system Watermill

› Up to four cards per document

› Automated "parking" of cards and automated shredding of diverted documents

› PCI-ready (Payments Card Industry Data Security Standard)

› Single, Z or C fold

Numerous options for post-processing:

› Self-Mailer Flexi Card for cost-efficient mailings

› Foil sealing of envelopes

› Job-specific sorting

› Address recognition through the envelope (1D barcode, 2D code or OCR)

› Functionality test of contactless cards through the envelope (ATR testing) during transport

› Dynamic scale for Computerized Weighing (CW)

› Integration of postage meters

› Envelope Print On Demand (EPOD)

› Attaching of acknowledgement receipts

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Advanced attaching technique
for increased productivity

Cardcube's attaching station reliably attaches up to 4,000 cards per hour to the card carrier using a new, patend-pending technique: A robot automatically and securely attaches up to four plastic cards to the corresponding document. Cards can be placed freely on the carrier while positions may vary from document to document. The robot can do even more: In case of a missing carrier document, all the corresponding cards are put into parking positions until the reprint has been completed. Diverted documents are automatically rejected and destroyed without interrupting the production process. The manual intervention usually involved with diverted cards, is now eliminated.
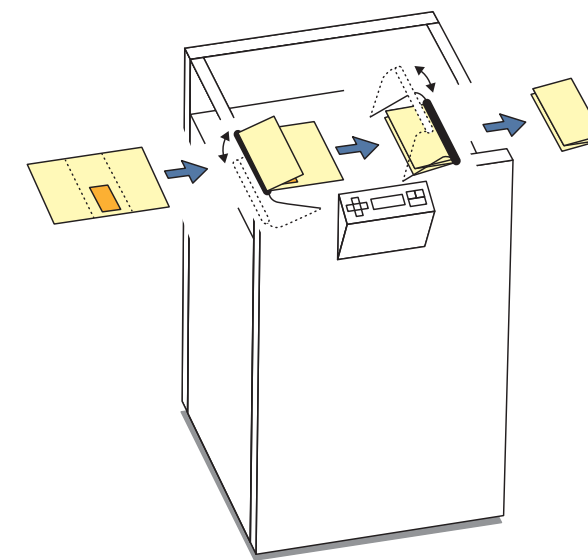
> Robot automatically attaches up to four cards per sheet

> Selective card positioning in x-, y-direction and angular positions on 2/3 of the document

> Automated parking of cards on 22 parking positions until the carrier document has been reprinted via a closed loop function

> Automated diverting of defective cards and carriers

> Shredding of diverted documents
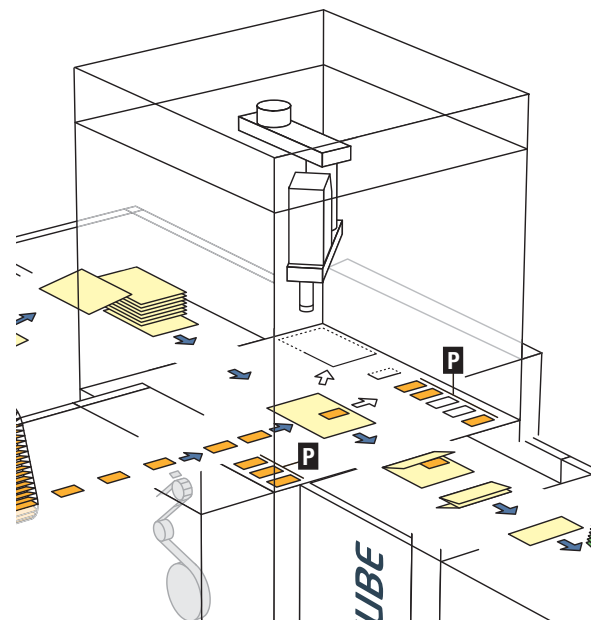
New flap folding unit
protects carrier and card

The new flap folding unit enables several folding geometries with an unprecedented level of quality: As the folding unit's "hammer" operates only in the area of the fold and does not affect the entire document, the embossed cards leave no imprint on the carrier document. The actual folding process is performed while the carrier is brought to a halt, so that the inertia of the attached cards has no impact on the folding accuracy – regardless of whether none, one or up to four cards are attached to the document.

> Precise, sharp-edged folding results

> Folds only edges and thus leaves no card imprint on the carrier

> Enables single, Z, C fold or no fold

> Quick changeover of folding type

> Patent-pending folding principle

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Card channel and attaching station
Cardcube's technology center

Card channel and attaching station comprise Cardcube's technology center. The card channel can be linked to the system from two sides as needed while at the same time optimizing the workspace for the operator. Ten or 16 stations can be freely configured with feeder magazines, various readers, turning units, restacking magazines, card buffers, mass storage units and labelling modules. The attaching station's robot reliably mounts up to 4,000 cards per hour onto the corresponding documents.
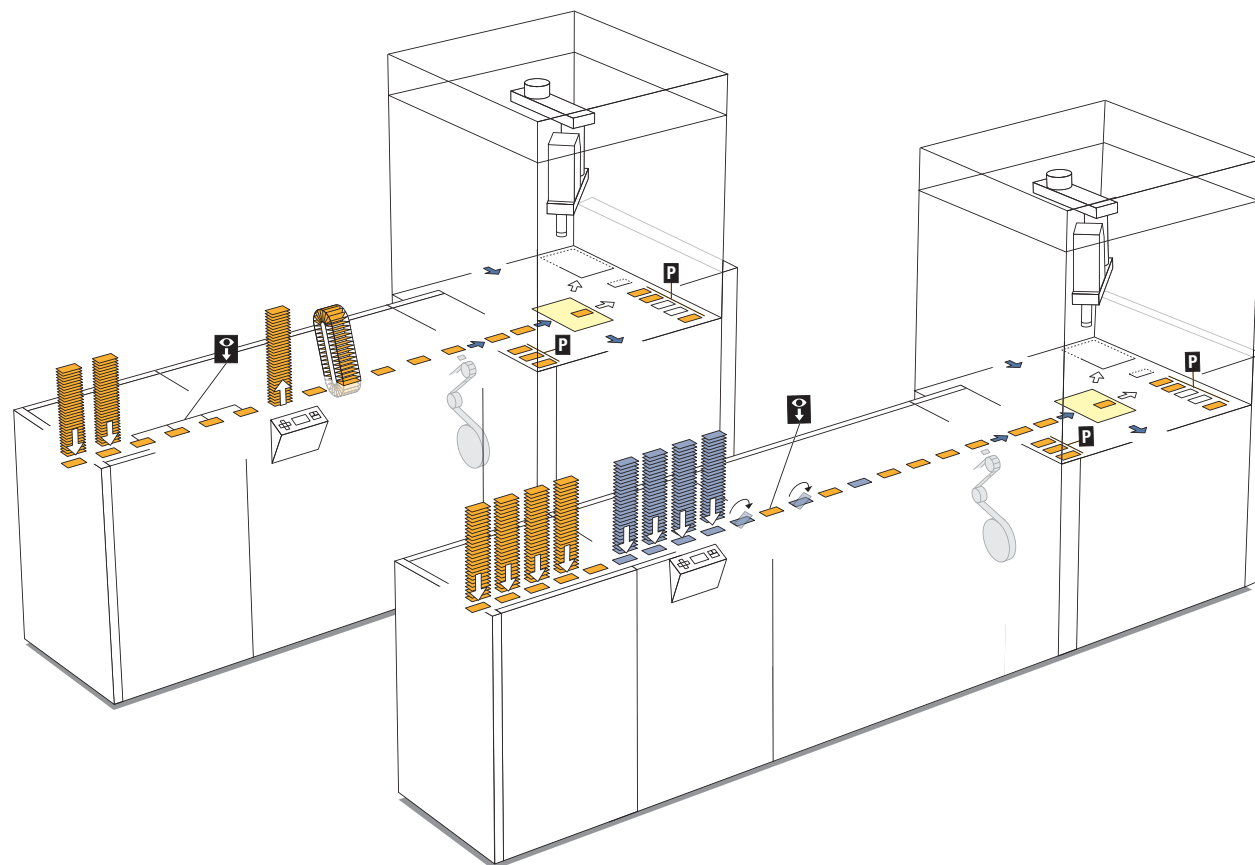
1 Feeder magazine

› For all standard ID-1 cards from 0.5 mm - 1.2 mm thickness

› Serial, parallel or selective draw-off

› High capacity for up to 500 non-embossed or 300 embossed cards
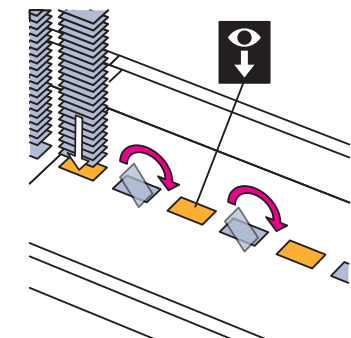
› Easy refill during operation
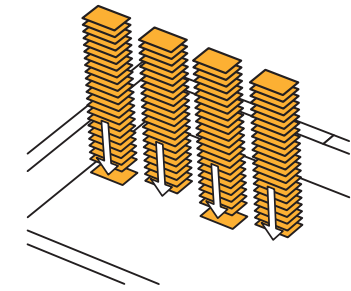
2 Card reader

› Magnetic stripe (LoCo/HiCo)

› Contact chips

› Contactless chips (ISO 14443, Mifare type A and B)

› 1D barcode

› 2D code/Data Matrix

› OCR/OCV

› Logos

› Other readers upon request
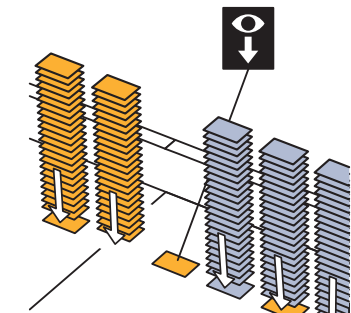
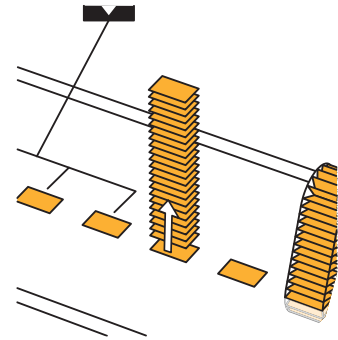**3 Card turn-over**

› Card can be read independent of feeding direction

› Card can be fed face-down and still be attached face-up

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Options for Inserting and Card Mailing
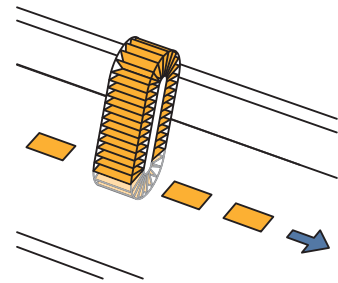
Self-Mailing

Sorting

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4 **Restacking magazines**

› For stacking cards

› For diverting (defective) cards

5 **Card buffer**

› Enables the synchronization of card and paper channel in online systems

› Holds up to 100 plastic cards

6 **Card storage Watermill**

› Brings unsorted cards into an optimal order

› Due to its high storage capacity, it is able to bundle a large number of individual jobs and forms the basis for efficient processing

› Minimizes time and effort for frequent job changeovers

› Enables fully automated pre-assembly of cards

› Comes with three or six modules per card channel and stores up to 1,890 or 3,780 cards respectively
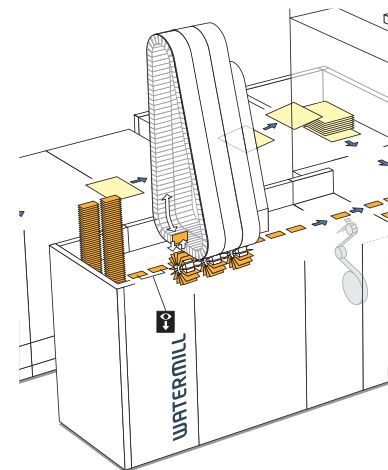
**7** **Different options for attaching cards**

› Standard: Label cut from a roll and applied to the back of the card

› Option: Hot glue is applied to the carrier
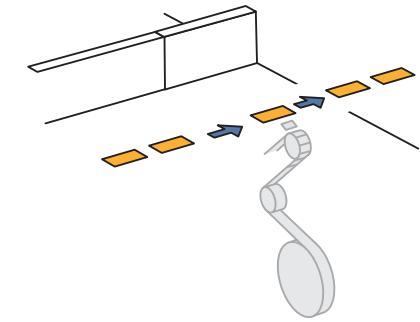
8 **Activation stickers attached directly onto cards**

› Pre-printed activation stickers are attached on the front side of a card in order to activate credit cards by dialing a telephone number printed on the label

› Advertising messages on the front side of the card

› Specifications of activation labels:
Width: 60 mm - 80 mm,
length: ½" (12,9 mm) - 1" (25,4 mm),
other label specifications available upon request
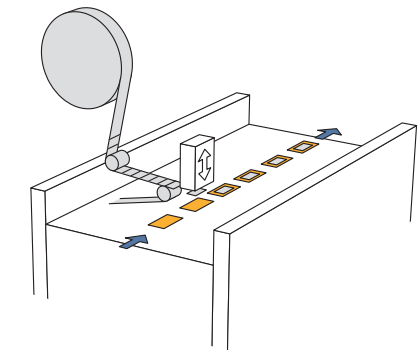
9 **Attaching station**

› Cards are attached to corresponding documents

› Robot automatically attaches up to four cards per sheet

› Selective card positioning in x-, y-direction and angular position on 2/3 of the document

› Automated parking of cards until the carrier document has been reprinted via a closed loop function (22 parking positions)

› Automated diverting of defective cards and carriers as well as shredding of the diverted documents
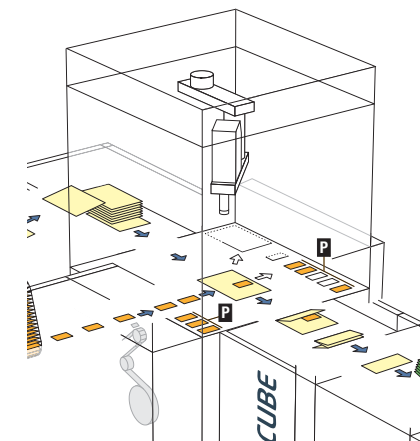
Integrity and productivity
## in the entire process

Cardcube runs absolutely securely and reliably. With Cardcube, the manual interventions involved with card processing are a thing of the past. This card mailing system automatically handles all production steps from printing or reprinting the carrier documents, to job preparation and inserting – thus enabling the "White Paper Factory" solution for card mailing. The need for error-prone, manual interventions due to diverted cards which lead to a costly and time-consuming reprinting process, is eliminated. Cardcube raises integrity and economic efficiency to a new level.

Reading units and sensors provide information about where each card and each carrier is located within the system. Item

tracking allows complete monitoring of materials and guarantees 100 percent

integrity for the entire card processing procedure – regardless of the configuration.
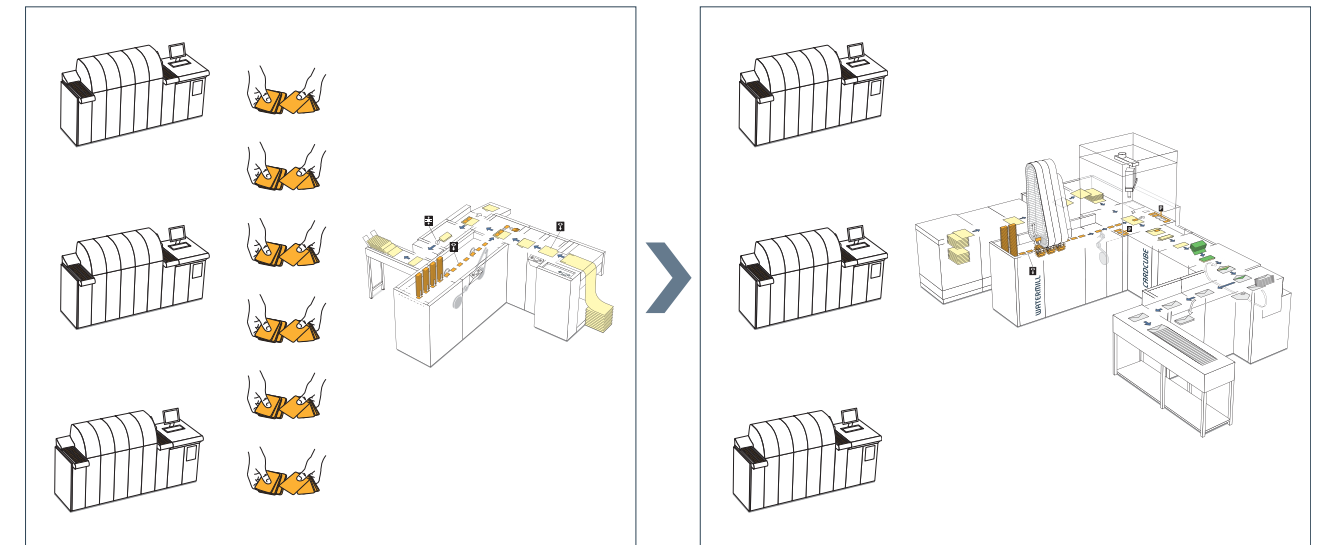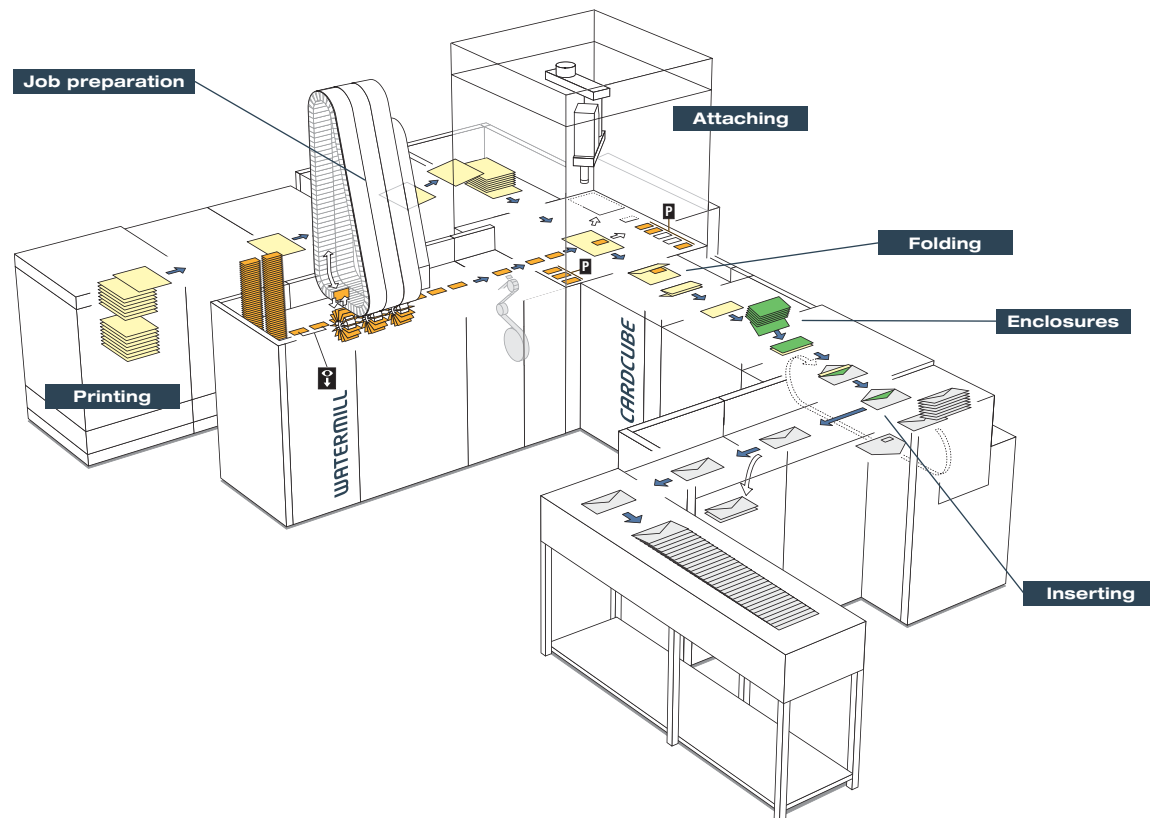
Optionally, the Watermill card storage system can be integrated into Cardcube which enables fully automated and secure card handling. Watermill stores cards from different personalization jobs and dispenses them in a job-specific sequence. This

means, for example, that all cards that are intended for one specific recipient can be collated altogether onto one single carrier document – independent from the type of card. This eliminates the time-consuming manual pre-sortation after the personal-

ization process that often implicates sorting mistakes and high production costs. The audit of the processing chain is getting considerably easier.

Technical Data
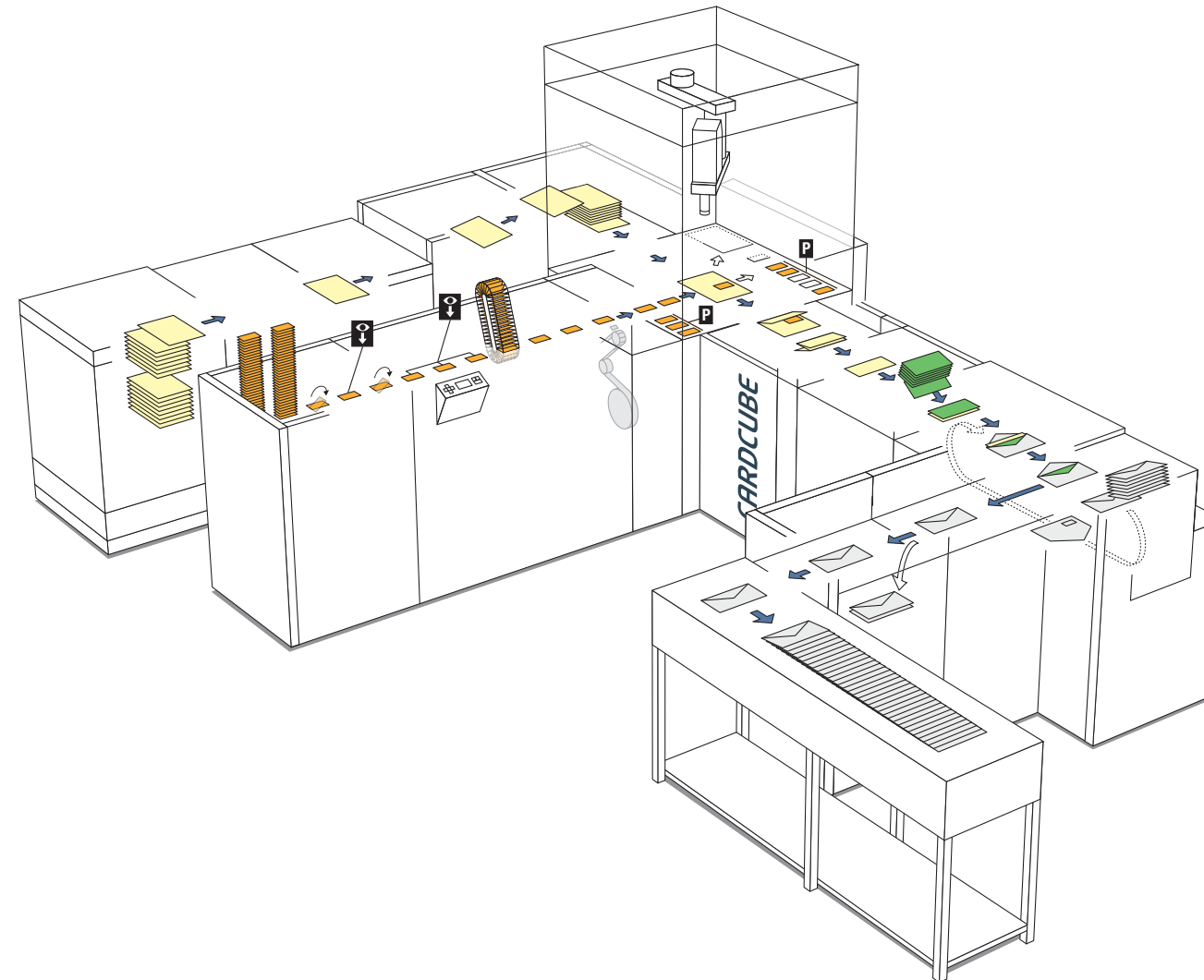
Max. performance

Up to 4,000 cards/h

Documents from the infeed channel

Width	210 mm - 216 mm	Paper weight	60 - 120 g/m²
Height	11" - 12"	Other formats and weights upon request	

Card formats

ISO/IEC 7810 ID-1 format CR 80 85.60 mm x 53.98 mm x 0.76 mm	Other formats upon request

Card thickness

0.5 mm - 1.2 mm	Other thicknesses upon request

Card material

PVC, ABS, PC, PET-G

Card feeding

Serial	Selective
Parallel	

Card channel

10 or 16 module position

Card buffer

Capacity of up to 100 cards

Card storage

Capacity of up to 1,890 cards with 3 modules	Capacity of up to 3,780 cards with 6 modules