

# BPS® C4

Compact solution for tomorrow's cash centers



Giesecke & Devrient  
Creating Confidence.

# Productivity redefined

Since 1852, Giesecke & Devrient (G&D) has stood for groundbreaking security technology throughout the entire banknote cycle – from manufacturing banknote paper and developing security features to printing and processing the banknotes themselves.

For over thirty years now, G&D has been the leading global provider of high-performance banknote processing systems. The company's products and solutions enable highly efficient processes when counting, authenticating, sorting, packing, and shredding banknotes.

## Intelligent solutions – efficient processes

Modern cash centers face a whole array of challenges. Growing time and cost pressures demand greater efficiency through automation, while new services call for flexible processes, further expanding the requirements catalog.

G&D's BPS C4 has been specifically developed to meet the needs of cash centers in commercial and central banks, cash-in-transit (CIT) companies, casinos, and other areas where intensive use is made of cash.

## Keeping the competitive edge

The BPS C4 system optimizes work processes, reduces costs, and enhances the productivity of banknote processing in a number of ways:

- Broad application range; exceptional versatility
- High throughput; low processing costs
- High availability; designed for endurance
- Intelligent system; intuitive operation
- Ergonomic design
- Maximum security
- Optimum service

## Global solution

The BPS C4 supports as many as 100 different currencies, up to five of which can be processed in succession on a single machine.



Modular system

# Customized to your cash center

## Modular, flexible, future-proof

The BPS C4 is a modular and scalable system that can easily be adapted to suit any substrate or process – from paper to polymer, from freshly printed to heavily soiled, from banknotes to casino tickets. Boasting high flexibility, the BPS C4 can be configured with up to 20 output compartments of differing capacities. In a single run, the banknotes are counted, identified, and authenticated, as well as sorted according to denomination, series, orientation, and fitness for circulation. Faced with altered requirements, cash centers can adapt quickly and easily thanks to flexible upgrades.

## Trailblazing sensor technology

A configurable sensor block covers all the basic functions, which include determining banknote denomination, authenticity, and fitness for circulation. This block can be expanded to include specific additional sensors if required.

## Optimum process support

Featuring up to 100 individually adaptable operating modes, the BPS C4 delivers the ideal solution for your specific requirements.

## Seamless integration in your cash management system

LAN access makes child's play of integrating the BPS C4 in existing cash management systems, increasing efficiency and transparency in your cash center.

## Tailored services

To ensure your BPS C4 continues to provide outstanding performance in the long term, we offer practice-oriented service and operator training as well as rapid technical support, customized maintenance agreements, and system updates. G&D's remote service option also helps to keep service times to a minimum and increase productivity.

**BPS C4-4** Standard variant



- 4 output compartments
- 100 BN/compartment

**SDM module**



- 4 output compartments
- 100 BN/compartment

**LDM module**



**LDM module**

- 3 output compartments
- 500 BN/compartment

**BPS C4-20** Maximum variant



- 20 output compartments
- 100 BN/compartment
- Comprising 5 SDM modules

▶ Expandable

<b>BPS C4-4</b>	4 output compartments	▶
<b>BPS C4-7</b>	7 output compartments (4 + 3)	▶
<b>BPS C4-8</b>	8 output compartments (4 + 4)	▶
<b>BPS C4-11</b>	11 output compartments (4 + 4 + 3)	▶
<b>BPS C4-12</b>	12 output compartments (4 + 4 + 4)	▶
<b>BPS C4-15</b>	15 output compartments (4 + 4 + 4 + 3)	▶
<b>BPS C4-16</b>	16 output compartments (4 + 4 + 4 + 4)	▶
<b>BPS C4-19</b>	19 output compartments (4 + 4 + 4 + 4 + 3)	▶
<b>BPS C4-20</b>	20 output compartments (4 + 4 + 4 + 4 + 4)	▶

# Maximum throughput

## Your processes – our know-how

We can provide you with expert support when implementing new processes. In fact, thanks to this service, many G&D customers have already made sustainable improvements to their cash center processes.

### Optimized processes

With over thirty years' experience in cash center processes, G&D is able to offer up to 100 flexible operating modes. These include highly efficient variants such as header card\* and fast deposit processing.

### Automatic data reconciliation

In conjunction with barcode readers, deposit data is captured automatically and synchronized with accounting data. This removes any need to generate or transfer data manually.

### Continuous operation

The BPS C4 enables uninterrupted operation. Here, banknotes are continually fed into the singler, tandem operation is possible, and an intelligent interface guides the user by displaying the output compartment fill levels.

### Parallel processing

Detection, evaluation, counting, and sorting can all be carried out in one processing step by a single operator. This enables a throughput of up to 40,000 banknotes per hour.

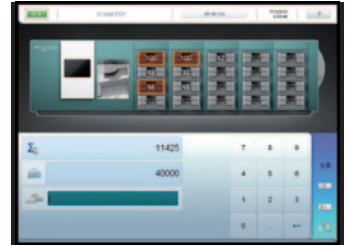
### High availability

Based on the robust, proven technology of the BPS 200 system, the innovative BPS C4 delivers the high quality people have come to expect of all G&D products – even in continuous operation, under extreme climatic conditions, or with poor-quality banknotes.

And, in the unlikely event that a banknote jam occurs, it can be eliminated quickly and without loss of data thanks to the system's ease of accessibility and new, intuitive interface providing user guidance.

## Header card process for maximum productivity





## State-of-the-art ergonomics and ease of use

Intelligent operation and optimized ergonomics are the key to higher throughput, shorter processing times, and thus lower costs. Further benefits include reduced outlay for training and fewer procedural errors.

What is more, technology that is ergonomic and intuitive to operate makes for motivated, more productive workers.

This is where the BPS C4 sets a new benchmark with its pioneering operating concept and outstanding ergonomics.

### Compact, ergonomic design

Users can operate the BPS C4 either sitting or standing. The compact layout of the singler and output compartments makes for easy, fatigue-free operation. System maintenance and cleaning are simple to accomplish, requiring no special tools.

### The touch panel: full functionality at a glance

- Graphical system and status displays
- Display of machine configuration, grouping, and assignment of output compartments
- Self-explanatory symbols, optional help texts
- User interface, help texts, and reports in the local language
- Detailed statistics and evaluation results
- Consolidation and display of accounting data

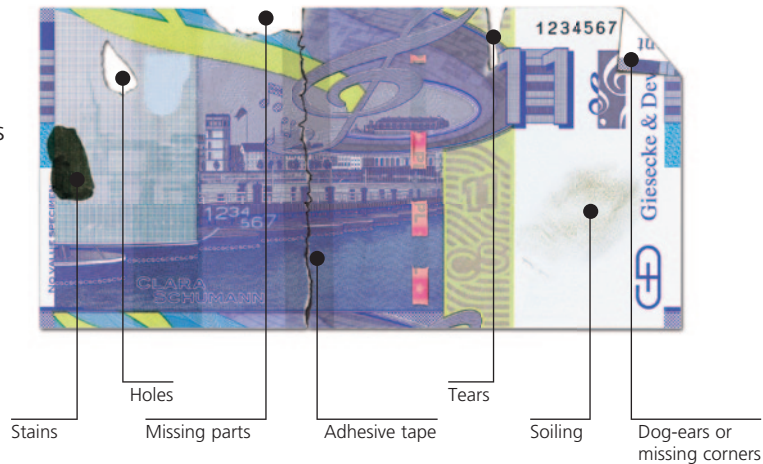
### Boosted processing performance

- High-speed, simple deposit accounting
- Efficient menu design and context-sensitive help functions
- Rapid switching between operating modes, currencies, and denominations
- Fast and flexible configuration of reports
- Clear and meaningful operating instructions and error messages
- Quick and easy operator changeovers
- Swift and reliable elimination of banknote jams
- Adaptation updates and software upgrades via USB flash drive
- Rapid and simple system configuration cloning



# End-to-end verification security

The heart of the BPS C4 is its high-tech sensor system. The full-face scanning of both sides of each banknote makes for an excellent degree of authentication and fitness detection as well as reliable counting and sorting results.



## Authentication

- Paper thickness/multiple items
- Absence of optical brighteners in paper
- Infrared features
- Magnetic printing properties (magnetically hard and soft)
- Magnetic properties of security thread
- Electrical conductivity of security thread
- Fluorescence
- Phosphorescence

## Denomination and orientation detection

- Print layout/series
- Format

## Fitness evaluation

- Physical properties check (e.g. holes, limpness, dog-ears, tears, missing parts, tape)
- High-quality recognition of soiling and stains
- Categories: ATM fit, fit, unfit

Up to five different currencies can be processed per machine, and additional sensor functions can be integrated as required.

## Double counting

Enhanced security: each banknote counted by the sensor is recounted when stacked in the output compartment.

## Fail-safe compartment

A separate fail-safe compartment ensures banknotes can be correctly accounted for no matter what operational issues arise.

## Video surveillance

The BPS C4 can be integrated with video surveillance systems to inseparably link the BPS C4's accounting data with video surveillance streams. Video sequences can then be retrieved quickly and selectively for individual deposits. In addition, the open stacker design allows the entire process to be monitored from start to finish.





The efficient and versatile BPS C4 can easily be adapted to your specific needs.

Please contact us. We will be happy to advise you personally.

## Benefits at a glance

The BPS C4 allows you to lower costs and optimize your workflows in a variety of ways, also ensuring greater productivity in banknote processing.

### High quality

The long service life and robust technology of products offered by G&D, the established market leader, help to safeguard your investments and enhance your ROI even in tough application environments.

### Maximum security

- Accurate accounting
- Counterfeit detection and fitness checks
- Accurate accounting after jam recovery
- Integration in cash center security solutions

### Innovative operation

The novel touchscreen design enables intuitive, language-independent operation.

### Strong versatility

The BPS C4 is a modular, scalable system that can be easily adapted to suit different types of processing. The system supports up to 100 individually configurable operating modes.

### Optimum service

- Reduced maintenance outlay
- Low follow-up and service costs
- Wide range of services

### High throughput and low processing costs

Only a single run is required for multiple sorting processes (up to 20 output compartments). Continuous banknote feeding by a single operator; optimum integration in cash center management software.

### Wide range of applications

Deployed all over the world, the BPS C4 can handle everything from standard banknotes to casino tickets; paper to polymer; new to heavily soiled or damaged items.

### Ergonomic design

Designed as a desktop system, the BPS C4 can be operated with users either sitting or standing. The compact layout of the singler, reject, and output compartments enables easy, fatigue-free operation.

## Options and accessories



- Adaptations for as many as 100 different currencies
- Further adaptations available for processing up to five currencies in succession on one machine
- Additional sensor extensions, e.g. NotaScan® Ink
- 4–20 output compartments with 100/500 banknotes per compartment
- Pneumatic module for air-supported singlers, especially with poor-quality banknotes
- Barcode reader
- Package solutions for special processes (e.g. header cards)
- External printers
- External solutions for banknote destruction, e.g. BDS systems from G&D
- External solution for invalidating banknote bundles, e.g. G&D's Banknote-Canceller
- Video surveillance system (VSI) with image display of banknote processing data
- Comprehensive expert advice on optimizing cash center processes
- Cash center management software: Compass VMS® and BPS® Connect
- Extensive service offerings and packages, e.g. practice-oriented service and operator training, rapid technical support, customized maintenance agreements, and system updates

### Technical Data

#### Dimensions

- Length: 1,260–2,556 mm (depending on configuration)
- Width: 515 mm
- Height: 610 mm with open base module cover: 1,200 mm (approx.)

#### Weight

100–220 kg (depending on configuration)

#### BN formats accepted

- Width: 60–90 mm
- Length: 100–180 mm

#### Processing speed

Singling rate: up to 12 BN/s

#### Throughput

Up to 40,000 BN/h

#### System concept

- Desktop device
- Single user
- Seated or standing operation

#### BN input

- Capacity for up to 800 loose banknotes, regardless of format
- Continuous feeding possible during singling process

#### BN output

- Up to 20 output compartments
- Output compartments for 100 or 500 banknotes
- Maximum number of banknotes per output compartment freely configurable
- Reject compartment capacity: up to 200 banknotes
- Separate fail-safe compartment for simple elimination of jams and accurate post-jam accounting

#### Banknote accounting in reject compartment

- Online: direct data entry at system
- Offline: separate data entry via PC or cash management system

#### System availability

Typically > 95% (depending on service conditions)

#### Power supply

- 230 V, 50/60 Hz
- 120 V, 50/60 Hz

#### Power consumption

0.5–1 kVA

#### Optional pneumatic module (air-supported singler)

Power consumption: 240 VA

#### Ambient requirements

- Ambient temperature: 15–35 °C
- Relative air humidity: 30–80%, non-condensing

#### Noise emissions

67–75 dB (A), in accordance with DIN EN ISO 11204

#### Data interfaces

- LAN/WAN (TCP/IP)
- USB hub with 4 ports (USB 2.0)
- Interfaces to cash center/vault management systems and to central computer
- Remote service

#### Certificates

- GS mark for "tested safety"
- CE labeling
- CCC-certified
- GOST-certified

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\* The header card technology used in this product has been licensed by Currency Systems International, Inc., of Irving, Texas, on the basis of US Patent No. 5917930 and additional patents in other countries.