



Giesecke+Devrient
Creating Confidence

BPS[®] M7

The centerpiece of the modular
High-Speed World



High-speed at the highest level

The BPS® M7 is the centerpiece of the Giesecke+Devrient High-Speed World. It blazes a trail into the connected and fully automated cash processing of the future, especially when combined with additional automated solutions such as NotaTracc® or NotaPack®

Central banks are required to guarantee the authenticity and fitness of banknotes through increasingly complex designs and security features. At the same time, requirements for cash processing efficiency are also increasing: intelligent automation with the flexibility to handle a huge range of denominations and substrates is essential.

With the BPS M7, G+D is offering the ultimate answer to these challenges. The system is already in use in more than 100 central banks worldwide and it is consid-

ered the global standard for advanced banknote processing systems. It can fulfill almost any individual requirement in terms of security, efficiency, digital connectivity, and automation.

Fit for the future of the cash cycle

Digitalization and automation are the main drivers for the refinement of the High-Speed Portfolio offered by G+D. The BPS M7 is the centerpiece of this High-Speed World. The modular concept enables flexible and scalable expansion and adaptation to future developments.

The BPS M7 offers maximum reliability for authentication, fitness assessment, counting, and sorting – with a high throughput of up to 120,000 banknotes per hour

0.0

Tolerance



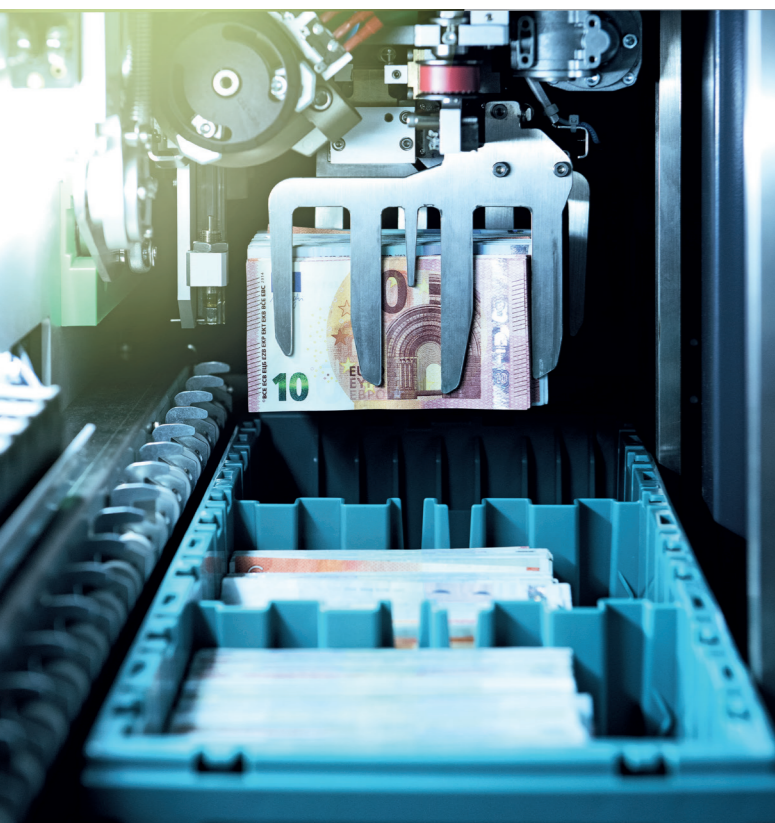
Setting standards to meet the highest demands

From extraordinary efficiency to reliable identification of all security elements including level 3 features, the BPS M7 is impressing demanding users in central banks worldwide



Top: High-end sensors with extraordinary precision – for reliable recognition of all security features

Left: Intelligent automation with the NotaTracc system (see page 6).



Ultimate efficiency

The BPS M7 processes up to 33 banknotes per second, with a throughput of up to 120,000 banknotes per hour. It is easy and intuitive to operate, with features including continual separation and the option of automatic post-issuance loading of band reels to ensure interruption-free operation. The low system reject and backup rates are important for efficient banknote processing.

Incredible precision

Best-in-class sensors guarantee zero error tolerance during counting and sorting, in addition to maximum precision in authentication. SensorFusion brings the automatic assessment of banknote fitness very close to human perception. This prevents notes that are still fit from being prematurely withdrawn from circulation.

Digital integration and big data

The BPS M7 connects each individual banknote to the digital world by scanning serial numbers. The life-cycle data includes 400 properties per banknote and offers a comprehensive basis to precisely analyze the behavior of banknotes in the cash cycle.

Integrated processes

The BPS M7 can be smoothly integrated into cash center processes. Automated solutions perfectly attuned to the system, along with interaction with cash management software, ensure that logistical bottlenecks are eliminated to fully unlock efficiency capabilities.

BPS X9: 100% quality assurance starts in production

For quality assurance of freshly printed banknotes, the BPS X9 checks the substrate quality, print, and features of each individual banknote in the printing plant. Single-note inspection guarantees note fitness for circulation. The Compass LUNA solution enables quality indicators to be tracked during the production process, enabling intervention in the process itself. Central banks can use the BPS M7 for additional quality controls before banknotes go into circulation

Additional benefits overview:

- 1** Incredible accounting accuracy: G+D is synonymous with the greatest possible accuracy in banknote authentication, counting, and sorting
- 2** The best sorting results require advanced sensor systems, and in this field our SensorBrain and SensorFusion are the next step. The system uses newly developed algorithms to process raw data from different sensors
- 3** Extraordinary efficiency: the BPS M7 has been developed for maximum efficiency, so the system is able to process banknotes of any quality. In addition, due to its low reject rates, it reduces associated handling to a minimum
- 4** Online shredder for secure banknote destruction: the optional shredder module can immediately destroy up to 100% of the processed banknotes in continuous operation
- 5** Proven worldwide: hundreds of BPS M7 systems have been processing billions of banknotes in many central banks worldwide since 2009, making it the most widely tried, tested, and used system on the market
- 6** Smart automation: efficiency in High-Speed Systems is only possible through seamless integration into cash center processes, with no logistical bottlenecks, and with paperless data transfer in use. A modular automation portfolio ensures fully automated processes on request, and encompasses the NotaTracc trays, NotaTracc loading module, and the NotaPack packaging system



Ready for challenges – today and tomorrow

The modular and highly flexible concept offers a custom-tailored solution for any requirement – and can also be easily adapted to future developments. The BPS M7 can be expanded to create an intelligently automated solution, and integrates seamlessly into cash center processes

Input and operating module

With large touchscreen, Large Continuous Feeder (LCF) (input capacity of up to 4,000 banknotes) and reject compartment

Large Delivery Module (LDM)

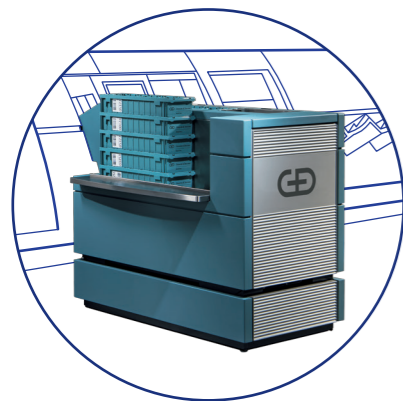
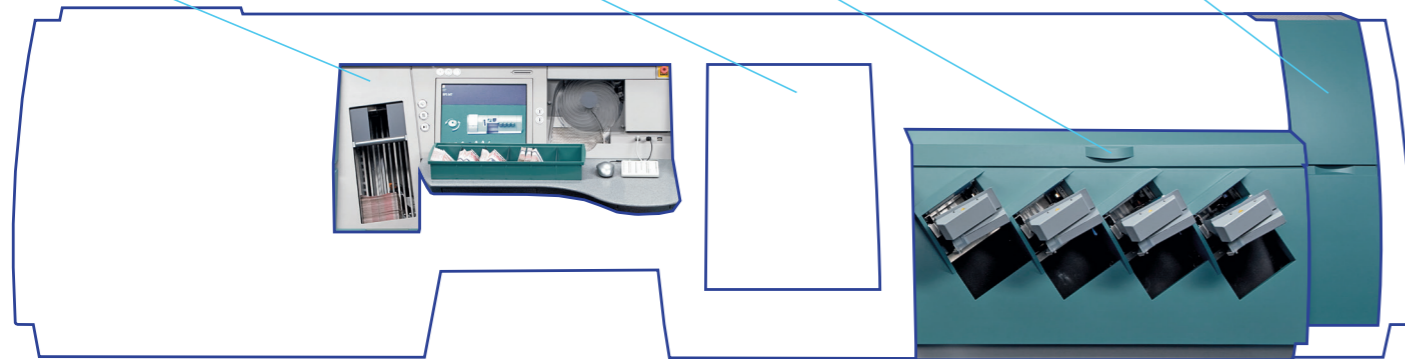
For the delivery of loose banknotes. Capacity: 2x2,000 banknotes

Standard Delivery Module

With 4 delivery stackers, each with one bander. Shown here with an integrated bundler – for bundles of 500 or 1,000 banknotes and for connection to a NotaPack system

Online shredder (optional)

For reliable online destruction of banknotes that are no longer fit – offering maximum counting accuracy and consistently high throughput



NotaTracc for automated feeding (optional)

The NotaTracc loading system consists of a loading module (NotaTracc L) and special banknote containers (NotaTracc T). It enables the BPS M7 to be loaded automatically – and increases the loading capacity to up to 40,000 banknotes

NotaPack 10: the pioneering packaging solution (optional)

NotaPack 10 is the highly efficient solution for automated and tamper-proof banknote packaging. This very compact system processes 10 banknote bundles per minute. Cash centers also benefit from specific functions such as multi-currency packaging and dynamic label printing



The basis of productivity is availability

With our needs-oriented consulting team and fully comprehensive service portfolio, Giesecke+Devrient customers benefit from full productivity and smooth operation of systems – for the entire life of the products

G+D consulting services: for solutions that are the perfect fit
Our experts analyze the individual needs, existing processes, special requirements, system environment, and more. Based on this analysis, we will recommend the right solution for your operation, and it will be integrated smoothly into your production processes.

G+D service: always at your side, whenever and wherever you need it
Our dense, global service network ensures that customers can rely on our support at all times. Your systems are kept up-to-date with frequent updates and upgrades – which can further boost productivity after installation.

G+D remote service: the fastest solutions via remote access
Use G+D remote services to optimize up-time of your systems. A large proportion of system failures can be immediately responded to and resolved using G+D remote access. Our service specialists identify the issue and put it right in an instant.

BPS ECO-SYSTEM: FUTURE-PROOF USE OF DIGITAL POTENTIAL

BPS Eco-System is an innovative portfolio of highly secure networked software products and web services that boost the efficiency of cash management and banknote processing



BPS ECO-PROTECT is an industry firewall that efficiently protects a BPS in a customer's environment against most malware attacks, and enables secure communication to and from the BPS



BPS ECO-REMOTE provides a highly secure remote management solution for BPS. It allows remote monitoring, performance management, diagnostics, and even software updates to be provided through G+D, or using in-house or third-party personnel, without local presence of a service engineer



COMPASS CASH CENTER is a comprehensive, process-oriented cash center management solution, enabling all of your cash management processes to be automated, optimized, and reliably monitored

Creating Confidence

Giesecke+Devrient (G+D) is a global security technology group headquartered in Munich. As a trusted partner to customers with the highest demands, G+D secures the essential values of the world with its solutions. The company develops technology with passion and precision in four major playing fields: payment, connectivity, identities and digital infrastructures.

G+D was founded in 1852. In the fiscal year 2021, the company generated a turnover of 2.38 billion euros with around 11,800 employees. G+D is represented by 89 subsidiaries and joint ventures in 33 countries.



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All technical data subject to change

TECH FACTS

Throughput:
BPS M7-22 up to 80,000 BN/h
BPS M7-33 up to 120,000 BN/h

BN formats (length × width):
100–181 × 58–90 mm

System availability:
(depends on maintenance conditions) ~96%

Dimensions (H × W × D):
BPS M7-4S
1,221 × 4,093 × 1,063 mm
BPS M7-12B
1,221 × 7,128 × 1,010 mm
(can be dismantled for transport)

Weight:
BPS M7-4S ~ 1,050 kg
BPS M7-12SB ~ 2,520 kg

Power supply (integrated):
230 V / 400 V, 50/60 Hz
120 V / 208 V, 50/60 Hz

Power consumption:
BPS M7-4S-22 ~ 2.8 kW
(at a 50% shredder rate)
BPS M7-4S-33 ~ 3.7 kW
(at a 50% shredder rate)

**Power consumption of
the required LVM.S
pneumatic module:**
4.5 kW

Dust extraction:
~ 1.0 kW

Noise output:
BPS M7-22 64–71 dB (A)
BPS M7-33 64–75 dB (A)

Temperature range:
15°C–30 °C (continuous operation)

Relative humidity:
30%–80%

Space required:
(including circulation area)
BPS M7-4SB ~ 25 m²

Approvals:
CE, GS