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 Currency Technology 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 Currency Technology is offering the ultimate answer to these challenges. The system is already in use in more than 100 central banks worldwide and it is considered 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 CURRENCY CYCLE
Digitalization and automation are the main drivers for the refinement of the High-Speed Portfolio offered by G+D Currency Technology. The BPS M7 is the centerpiece of this High-Speed World. The modular concept enables flexible and scalable expansion and adaptation to future developments.

TOLERANCE
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.
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.

**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. The Fusion sensor means that the assessment of banknote fitness comes very close to human perception. This prevents notes that are still fit from being prematurely withdrawn from circulation. The Fusion sensor also enables simple and controlled amendment of sorting thresholds.

**DIGITAL INTEGRATION AND BIG DATA**
The BPS M7 connects each individual banknote to the digital world by scanning serial numbers. The lifecycle data includes 400 properties per banknote and offers a comprehensive basis to precisely analyze the behavior of banknotes in the currency 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 SeriTrack® LUNA Data Intelligence® 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.

**1. Incredible accounting accuracy: G+D Currency Technology 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 Brain and Fusion sensors 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 system, and the NotaPack packaging system.**
The BPS Eco-System is an innovative portfolio of extremely secure networked software products and web services that boost the efficiency of cash management and banknote processing.

**BPS Eco-Protect** is an industrial firewall that protects the BPS in the customer’s environment from most malware attacks, and guarantees that incoming and outgoing BPS communication is secure.

**BPS Eco-Remote** is a highly secure remote management solution for BPS. It enables monitoring, performance management, diagnosis, and even software updates to be performed remotely by G+D, or employees of the company itself, or a third-party company, without requiring a customer service employee to be present on-site.

**Compass VMS** (Vault Management System) is a comprehensive, process-oriented cash center management solution, through which your cash management processes are automated, optimized, and reliably monitored. Compass VMS is a comprehensive, process-oriented cash center management solution, through which your cash management processes are automated, optimized, and reliably monitored.

**NotaPack 10** is a highly efficient solution for automated and tamper-proof banknote packaging. This extremely compact system processes up to ten banknote bundles per minute. Cash centers benefit from specific functions such as multi-currency packaging and dynamic label printing. Additional advantages include a very high level of modularity and optical label and bundle inspection.

**Large Delivery Module (LDM)**
- For the delivery of loose banknotes.
- Capacity: 2 x 2,000 banknotes.

**Standard delivery module**
- With 4 delivery stackers, each with one bander. Shown here with an integrated bander – for bundles of 500 or 1,000 banknotes and for connection to a NotaPack system.
- For reliable online destruction of banknotes that are no longer fit – offering maximum counting accuracy and consistently high throughput.

**NotaTracc** for automatic infeed (optional)
- The NotaTracc system consists of a loading module (NotaTracc L) and special banknote containers (NotaTracc T). It enables automatic and continual loading of the BPS M7, and offers increased loading capacity of up to 40,000 banknotes. NotaTracc trays are also ideal for storage and transport – such as when depositing banknotes at the central bank.

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**G+D CONSULTING SERVICES:** FOR SOLUTIONS THAT ARE THE PERFECT FIT
- Our experts analyze individual needs, existing processes, special requirements, and the system environment. Based on this analysis, they work together with you to develop precisely the right solution to meet your needs.

**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 even boost productivity after installation.

**G+D REMOTE SERVICE: THE FASTEST SOLUTIONS VIA REMOTE ACCESS**
- Use G+D remote services to optimize the uptime 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.

The basis of productivity is availability

With our needs-oriented specialist advice and fully comprehensive service portfolio, G+D customers benefit from full productivity and smooth operation of systems – for the entire life of the products.

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.

G+D Service: always at your side, whenever and wherever you need it

G+D Remote Service: the fastest solutions via remote access

Use G+D remote services to optimize the uptime 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.

**SINGLE-SOURCE ARCHITECTURE**
- The programs, adaptations, and configuration parameters are stored in just one place on the system, and distributed from there at start-up, ensuring that all systems behave identically. Updates also need only be loaded at a single point.

**NotaPack 10: The trailblazing packaging solution (optional)**
- NotaPack 10 is a highly efficient solution for automated and tamper-proof banknote packaging. This extremely compact system processes up to ten banknote bundles per minute. Cash centers benefit from specific functions such as multi-currency packaging and dynamic label printing. Additional advantages include a very high level of modularity and optical label and bundle inspection.

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Securing Values: Giesecke+Devrient Currency Technology

G+D has played a significant role in advancing the development of banknotes since 1852 – and always with the aim of offering our customers a crucial advantage.

We are now an end-to-end provider for the whole cash cycle, and have unique and thorough expertise in each application area: from counterfeit-proof banknote design and highly efficient banknote processing, to reliable banknote destruction. This extensive knowledge is incorporated into everything we do for our customers.

Let’s shape the future of the cash cycle together!

Ready for the future?

Our experts will be pleased to show you how you can integrate our High-Speed World into your cash center processes on a custom-tailored basis. Learn how you can benefit from connected, automated cash processing.

Let’s talk!

Find more information on our website:
www.gi-de.com/ct

TECH FACTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Maximum throughput</th>
<th>Banknote formats accepted</th>
<th>System availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS M7-22</td>
<td>80,000 BN/hr (22.2 BN/s)</td>
<td>100–181 × 58–90 mm</td>
<td>~ 96% (depends on maintenance conditions)</td>
</tr>
<tr>
<td>BPS M7-33</td>
<td>120,000 BN/hr (33.3 BN/s)</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions (H x W x D)</th>
<th>Weight</th>
<th>Power supply (integrated)</th>
<th>Power consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPS M7-4S</td>
<td>1,221 × 4,093 × 1,063 mm</td>
<td>~ 1,050 kg</td>
<td>230 V / 400 V, 50/60 Hz</td>
<td>2.8 kW (at a 50% shredder rate)</td>
</tr>
<tr>
<td>BPS M7-12SB</td>
<td>1,221 × 7,128 × 1,010 mm</td>
<td>~ 2,520 kg</td>
<td>120 V / 208 V, 50/60 Hz</td>
<td>3.7 kW (at a 50% shredder rate)</td>
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</table>

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<thead>
<tr>
<th>Model</th>
<th>LVM.S pneumatic module</th>
<th>Dust extraction</th>
<th>Noise output</th>
<th>Ambient temperature</th>
<th>Relative humidity</th>
<th>Space required</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.5 kW</td>
<td>~ 1.0 kW</td>
<td>64–71 dB (A)</td>
<td>15–30 °C (continuous operation)</td>
<td>30–80%</td>
<td>~ 25 m²</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Approvals</th>
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<tbody>
<tr>
<td></td>
<td>CE, GS</td>
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