The NDP Quantum Series State-of-the-Art Technology





The ideal platform for centralized check processing centers in small to mid-size financial institutions, for regional centers and specialized applications in large banks, and for remittance processing operations in all industries.

Taking Performance to New Levels

Burroughs engineering teams have incorporated the best-in-class features of our high-speed transports into the NDP Quantum Series platform resulting in unrivaled performance throughout our entire product line. Every aspect is designed to provide the dependability required for transaction-intensive environments.

Offered at 200, 300 and 600 documents per minute (dpm), the NDP Quantum Series is the only product family in its class that is field upgradeable from 200 dpm all the way to 600 dpm. Also, the NDP 600 Quantum can be downgraded to 300 dpm if your volumes decline. With the NDP Quantum Series, you can expect up to 60 percent higher throughput when upgrading from a DP 500 or similar competitive model – outperforming competitive transports in its class by as much as 20 percent.

Maximize Your Return

Burroughs is the leader in providing innovative products and tools designed to improve your overall productivity.

- Character Recognition Software Utilizes multiple Courtesy Amount Recognition (CAR) and Legal Amount Recognition (LAR) engines to achieve industry-leading read rates with exceptional accuracy.
- Image Exchange Utilities Tools to ensure the quality and usability of images and prevent fraud.
- StatsPlus Tools to measure and maximize platform and operator performance and to plan preventive maintenance.
- **Operator Video Training and Help** Transport-based multimedia instructions designed to assist the operator in operating and maintaining the transport.

The NDP Quantum Series Features.



Open Track Design

An open track design provides for faster recovery.

The open track design and document indicator lights make it easy to locate exceptions. The wider track walls result in fewer jams.

Roller System

Advanced roller materials optimize document handling.

Long-life rollers reduce noise and grip items better with reduced downtime and stops.

Ergonomic Design

Our engineers designed these latest features with you in mind.

Curved console shape allows for easy hopper reach, reducing operator strain and fatigue. The large work surface provides increased supply area.

Operator Display

A large 17-in. adjustable flat-panel display and optional touch panel are available for easy screen viewing from any area of the transport.

The operator may either touch objects on the panel or click on them with the mouse, whichever is more convenient.

Removable Kneewell Panel

The removable kneewell panel is designed for flexibility. Raised-height models come with a kneewell panel that can be removed for comfortable seated read and key operation.

PC Cabinet

Burroughs understands the importance of design.

For an orderly work area, the PC cabinet houses and protects the Windows track control PC. The front door opens out 135 degrees for convenient operator access to the PC and storage area.

Primary Feeder

The NDP Quantum Series is designed for continual operation and increased productivity.

The automatic primary feeder holds approximately 1,400 documents. An optional, large-capacity hopper with vibrating floor automatically aligns documents for fewer jams. It holds up to 2,550 documents and is available for higher volume operations requiring maximum wall-clock throughput. A Hopper Flag allows for "loading on the fly". A standard manual feeder (single item feeder) provides the ability to enter individual documents manually. The unique Burroughs Staple Detector is standard on all NDP Quantum Series models.

Secondary Feeder

Productivity is improved when the operator can perform other tasks because the transport automatically feeds control documents into the track.

The optional secondary feeder merges documents into the processing stream under program control.

Field Upgradeability

Protecting your investment.

The NDP Quantum Series is upgradeable on-site from 200 to 300 to 600 dpm. This enables you to start with a lower-cost platform and upgrade as your business needs change.

The NDP Quantum Series 600 dpm can be downgraded to 300 dpm if your volumes decline.

Reader

Superior MICR and OCR Readers significantly reduce the time required for data correction due to character rejects and substitutions.

Our magnetic and optical read buffers for the same E13B code line can be combined automatically. The NDP Quantum Series offers a variety of MICR and OCR readers to process documents with multiple fonts, bar code, and dual-height MICR or OCR code lines. OCR code line height selection is programmable, eliminating stops for manual read height adjustments between different batches of work.

Post-Read View Station

Unlike any other in the industry.

Capability to view codeline area after read without removing and refeeding the document.

Multi-Jet Endorser (MJE)

Fewer cartridge changes and lower supplies cost are realized through a 500 percent ink capacity increase.

The NDP Quantum Series provides two types of endorsers: the programmable MJE and the Fixed Information Stamp Endorser. The MJE allows for endorsement of up to four lines of programmable text with a graphical logo, for the front and/or rear of documents. It is available with reservoir ink supplies to minimize consumable replacement efforts. The Fixed Information Stamp Endorser is available in front or rear endorsement styles.

12-Pocket Stacker Module

Our pocket design maximizes operational efficiency.

Up to three modules are available (36 pockets in twelve pocket increments) arranged in an award-winning herringbone pattern to reduce the transport footprint. Enhanced document aligners improve handling of tall documents. Resume Flow switches are positioned at every module for operator convenience.

Encoders

The NDP Quantum Series offers both low-speed and high-speed encoder options to ensure highly reliable encoding performance to meet your throughput needs and achieve fault resilience.

Burroughs high-speed encoders provide an extensive closed loop error detection system to prevent mis-encoded characters. Unlike its major competitors, the NDP Quantum Series encodes at the rated speed with a single encode module. This avoids the mechanical complexity and additional item manipulation of a split-track solution. Drop-in ribbon loading is provided.

Low-Speed Document Encoder

This low-cost encoding option for smaller item volumes offers superior print quality and reliability.

The Low-Speed Encoder module, encodes MICR or OCR characters at up to 135 dpm.

Amount-Only High-Speed Encoder

Choose our accurate high-volume amount encoder, with wider track, in POD or remittance applications.

The Amount-Only High-Speed Encoder module encodes MICR amounts and transaction codes at 200, 300 or 600 dpm.

Full-Field High-Speed Encoder

The high-speed encoder is designed with a wider track for fewer stops and higher productivity.

The Full-Field High-Speed Encoder module encodes up to 65 MICR characters at speeds ranging from 100 dpm to 383 dpm.

Image Capture

High-quality images are essential to high recognition rates, trouble-free image exchange and dependable archive.

Burroughs transports may be configured to capture black & white, gray level or color images of the front and rear of each item at track speed. High resolution gray level images are often used for character recognition or special post-pocessing applications, such as signature verification or data-mining. Image quality suspects are flagged on black & white and gray level images in conformance to the ANS X9.100-180 standard. The transport can be stopped to resolve developing issues per customer guidelines. Images can be digitally signed to prevent undetected alteration that could otherwise occur at any point in the image's exchange or storage.

Image usability evaluates items to verify that key fields meet the requirements of the recipient. The improved intelligent combination of MICR and OCR code line recognition reduces rejects and read errors - a growing problem with laser-printed substitute checks

Downstream Image

Fully processed items can be archived with Downstream Image.

The downstream image module, located before the first pocket module, captures a fully encoded and endorsed front and rear image of a document.

The downstream camera can optionally be configured with red filters for European Giro applications or with an emboss camera for Japanese applications. The European Giro cameras can be configured to capture both filtered images for ICR and unfiltered images for archive.

Upstream Image

Upstream capture enables real-time recognition processing. For more efficient image-supported exception handling and lower cost remittance systems, an advanced upstream front/rear camera is available on the NDP Quantum Series. Both downstream and upstream image modules can be configured on the same transport.



With its bold progressive look, open-track design, and advanced performance features in every module, the NDP Quantum Series offers unrivaled throughput performance, quality and reliability.

The NDP Quantum Series Specifications

System Specifications

Performance

Sustained at the following speeds for 6-in. (15.2 cm) checks:

- NDP 200 200 documents per minute (dpm)
- NDP 300 300 documents per minute (dpm)
- NDP 600 600 documents per minute (dpm)

All devices run at track speed unless otherwise noted

Magnetic MICR Reader Options

- Single-height Auto-Detect reads intermixed E13B and CMC7 documents
- Dual height reads E13B MICR

Optical Character Recognition (OCR) (optional)

- (2) OCR codelines selected under application control
- Fonts: OCR-A, OCR-B, OCR-7B and E13B Requires upstream front image

Front and Rear Image Capture

Image renditions available

- Bi-tonal (black/white)
- Gray level (256 gray shades)
- Color (24-bit, RGB)

Image resolutions available

- 240 or 200 dpi, bi-tonal
- 240, 200, 120 or 100 dpi, gray level
- 200 dpi, color

Image compression standards supported

- CCITT Group 4 (bi-tonal images)
- JPEG baseline (for gray level and color images)

Image capture combinations available

Using gray level cameras

- Front image capture (up to three images)
 - 240 or 200 dpi, bi-tonal (CCITT)*
 - 240 or 200 dpi (full resolution), gray level (JPEG) *
 - 120 or 100 dpi, gray level (JPEG)

Rear image capture (up to two images)

- 240 or 200 dpi, bi-tonal (CCITT) *
- 240 or 200 dpi (full resolution), gray level (JPEG) *
- 120 or 100 dpi, gray level (JPEG)

Using color cameras

- Front image capture (up to two images)
 - 200 dpi, color (JPEG)
 - 200 dpi, bi-tonal (CCITT)
- Rear image capture (up to two images)
 - 200 dpi, color (JPEG)
 - 200 dpi, bi-tonal (CCITT)

Barcode Reader (optional)

• Interleaved "2 of 5" or "code 3 of 9" Requires OCR reader

Document Feeders

- Primary hopper capacity: 1,400 or 2,550 documents
- Secondary hopper capacity: 125 documents (optional)
- Storage tray in rear of primary hopper: capacity 700 documents
- Storage tray in front of manual feeder: capacity 200 documents
- Double document detector / staple detector
- Document tray shelf adjacent to primary hopper

Endorsers

- Print reservoir system (standard)
- (1) front and/or (1) rear MJE (optional)
- Maximum four lines of text with graphical logo (1) front and/or (1) rear fixed information stamp (optional)

Encoders (optional)

- Low-Speed:
 - E13B, CMC7, OCR-A or OCR-B, up to 135 dpm
- High-Speed:
 - Amount fields/transaction codes (16 characters) up to 600 dpm, E13B or CMC7
 - Full-field: 16 65 characters, 383 100 dpm, E13B

Technical Specifications

Module	Length	Depth	Standard Height	Raised Height	Standard Installed Weight	Raised Installed Weight
Workstation operator console with upstream front/rear image	99 in (251.5 cm)	37 in (94.0 cm)	35 in (88.9 cm)	41 in (104.1 cm)	770 lbs (350 kg) 865 lbs (393 kg)	880 lbs (400 kg) 975 lbs (443 kg)
High-speed encoder	26 in (66.0 cm)	29 in (73.7 cm)	35 in (88.9 cm)	41 in (104.1 cm)	280 lbs (127 kg)	310 lbs (144 kg)
Image	21 in (53.3 cm)	29 in (73.7 cm)	35 in (88.9 cm)	41 in (104.1 cm)	252 lbs (114 kg)	277 lbs (125 kg)
First stacker	33 in (83.8 cm)	29 in (73.7 cm)	32 in (81.3 cm)	38 in (96.5 cm)	260 lbs (118 kg)	310 lbs (141 kg)
Second stacker	27 in (68.6 cm)	29 in (73.7 cm)	32 in (81.3 cm)	38 in (96.5 cm)	180 lbs (82 kg)	230 lbs (105 kg)
Third stacker	27 in (68.6 cm)	29 in (73.7 cm)	32 in (81.3 cm)	38 in (96.5 cm)	180 lbs (82 kg)	230 lbs (105 kg)
Acoustic pocket cover			37 in (94 cm)	43 in (109.2 cm)		
Output Pockets						
Increments of 12:	Up to a total of 36	pockets				
Pocket capacity:	400 documents					
Acoustic pocket covers	(Optional)					
Power Requirements	Input Voltage	Ampere (amp)				
50 Hz	200-240	30 (max. config.)				
60 Hz	200-240	30 (max. config.)				
Software Interface						
Burroughs Common API under Windows XP						
Compatible with other Burroughs Common API transports						
Safety and Compliance Certifications						

UL, CSA, TUV/GS, CE, FCC-A, VCCI, C-Tick

Consumables

Consult your Burroughs Supplies Catalog or call 1-800-BURROUGHS (1-800-287-7684) within the USA. Visit www.burroughsstore.com

In Canada call 1-800-387-6127. Contact your Burroughs representative for international orders

Warranty

90 days free maintenance period (varies by location)

Note: Specifications do not provide a viable substitute for a detailed configuration, environmental and infrastructure planning study. Specifications may change without notice.



Advanced Performance Features in Every Module

Performance as Promised.

Reliability is defined as delivering what is promised. You asked for a machine that was proven. You asked for a scalable, upgradeable machine for investment protection. You asked for the best uptime rates to meet your deadlines. With the advanced NDP Quantum Series, we deliver...

- A transport that leverages the technology of the highest performing transports into the price performance of entry-level and mid-range transports.
- A fully scalable and upgradeable machine that fits all your needs from 200 to 300 or 600 documents per minute.
- A machine designed to give you the industry's highest availability rate of 98.9 percent. Every aspect of the NDP Quantum Series is designed to provide the reliability, scalability and dependability required for transaction intensive environments.

Quality Takes Many Forms.

Our quality philosophy is to continually improve all aspectsof our business, people, processes and performance.

For the NDP Quantum Series, we implement rigorous supplier qualification, Lean Manufacturing techniques and the Six Sigma methodology. These practices improve our arrival quality and lower cost by reducing the variation in our business processes.



"We needed the best sorter in the market and nothing else measured up to Burroughs products. We weren't interested in a short-term solution, we wanted to develop a long-term relationship and partnership."

Fred Holzapfel V.P. Computer Operations Anchor Bancorp, Inc.

The Burroughs Advantage

For over 100 years, Burroughs has provided customers access to world-class service, industry-leading technology and technical support for a diverse portfolio of payment-related products and services. In 2012, Burroughs expanded its already impressive service capabilities through the acquisition of Solvport and Absolute ATM.

As a result of acquisition and organic growth, Burroughs supports and maintains approximately 100,000 check & document imaging products, 60,000 onsite and off-premise ATMs, 15,000 intelligent safes systems and over 12,000 kiosk and self-service solutions annually.



- Over 300 field engineers geographically dispersed coast-to-coast
- •Forward stocking parts facilities strategically placed throughout the United States
- •Redundant call centers supporting customers with a multi-time zone footprint
- •24/7/365 phone support resources capable of providing expert on call services around the clock

For more information about the entire line of Burroughs solutions visit us at www.burroughs.com or call 1-800-BURROUGHS

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