



TELLERSCAN[®] 230

Enhanced, High-Speed, Reliable Check Scanner
For Deposit Automation and Corporate Remote Deposit Applications



Features:

- **Two high-performance models with unique, continuous feeder and high-duty cycles**
TS 230-65 up to 65 items/minute
TS 230-100 up to 100 items/minute
- **Ergonomic design built upon highly reliable TS 220E platform**
- **Industry leader in image quality for highest CAR, IQA, and ICR rates**
- **Improved Best Read[®] MICR for maximum MICR accuracy**
- **Easy integration — common API and remote support**
- **Upstream endorsement facilitates Check 21 image exchange**

High-speed scanning, reliability, and performance:

- ◆ The TellerScan 230 (TS 230), based on Digital Check Corporation (DCC)'s successful and highly reliable TS 220E platform, embodies the most advanced design for distributed check capture on the market today.
- ◆ The TS 230 is available in two models, both with DCC's unique continuous feed feature, which allows checks to be added while scanning – for higher throughput and more volume than traditional scanners. The **TS 230-65**, scanning at up to 65 items per minute, is ideal for teller windows and corporate environments that need to process deposits throughout the day or in a narrow timeframe. The faster **TS 230-100**, at 100 items per minute, is ideal for the commercial window of banks, the back counter of small branches, or for corporate capture.

Ergonomic design for branch or corporate environments:

- ◆ The TS 230's quiet operation is ideal teller operation or treasury office activities. With just 5" x 8 1/2" of desktop or counter space, TS 230 has the smallest footprint in the industry. The short U shaped transport path with separate front and rear scan heads provides smooth operation for optimal feeding and high reliability. Exit pocket tabs and sensor keep batches of checks in order, including personal and business checks.
- ◆ A self-adjusting, jam resistant feeder combined with a double feed infrared sensor protects against piggybacked or missed items. The transport can even process thick checks such as 'rebate' check cards sent through the mail as postcards. A sophisticated double feed detection system analyzes suspect items in real time, avoiding false double feeds due to the 'thickness' of these card-style checks while insuring that only rare 'real' double feeds are caught.

Highest quality images:

- ◆ DCC's cutting edge image quality is a key factor in TellerScan's leadership in both branch automation and remote deposit installations. DCC scanners are used by major US banks and Treasury Management corporate customers to scan over 100 million items per month.

- ◆ The TellerScan's unique optical/electrical design, combined with DCC's Best Read[®] image thresholding, analyzes each item individually to maximize image quality and minimize user intervention resulting from poor image quality. This provides sharp, easy to read images that support Check 21 Image Quality and Usability (IQA & U) standards. Dual tricolor CIS imaging modules provide the highest image definition available in today's countertop check scanners. As each check is scanned, it is analyzed before adaptive thresholding into black and white using proprietary software technology to sharpen the edges of characters. This, combined with an anti-skew transport, gives superior CAR/LAR (Courtesy and Legal Amount Recognition), OCR/ICR recognition of machine print, signatures, and name or address information. Some challenging items with complex colored backgrounds or faint colored inks may be optionally captured and stored locally on the PC in grayscale or color for research.

Enhanced Best Read[®] MICR:

- ◆ The TS 230 advances DCC's unique, high-quality Best Read[®] MICR technology with new, improved algorithms. The integrated magnetic MICR reader captures and passes the codeline information to the controlling PC with high-speed USB2 interface where the MICR characters are decoded to ensure maximum accuracy through proprietary, multiple verification techniques. Then the Best Read[®] OCR MICR verification performs additional verification of MICR data based upon confidence levels, to deliver the highest MICR accuracy read rate for countertop scanners in the industry today.

Easy to integrate - common API & network upgradeability:

- ◆ Digital Check's TellerScans are designed to be quick and easy to integrate with USB2 plug-and-play connection. A common API allows all TellerScan scanners to operate from the same code reducing your implementation time and software maintenance costs. Adding a scanner to the installation or updating to new hardware within the organization becomes a snap. Remote support tools can log errors regardless of the scanner so that they can be interrogated remotely – and should an enhanced version of firmware be released, each scanner can be updated remotely over the network.



Providing Check Scanning Solutions &
Check Scanning Equipment Worldwide

Programmable upstream endorsement for Check 21 image exchange:

◆ The programmable inkjet endorser prints downloaded endorsements (dates, sequential numbers, logos, etc.) on the back of the checks before scanning. This pre-scan non-contact endorser uses commonly available high capacity HP ink cartridges enabling checks to be image truncated at the earliest stage. The endorser's crisp legible endorsement, captured with the image of the check, is ideal for Check 21 image exchange.

Specifications

Model TS 230-65 — up to 65 items/minute
Model TS 230-100 — up to 100 items/minute

Unit Size: 5.1" x 8.6" (paper trays add 2-3 inches)

Paper Size: (Up to UNI A6)

Document Height: 2.12" - 4.17" (54-106mm)

Document Length: 3.19" - 8.97" (80-228mm)

Document Weight: 16-120 lb. (60-500 grams/sq.meters)

Motorized Autofeeder:

Capacity: 1-50 items continuous feed (up to 50 items depending on document thickness and condition)

Double Feed Detection:

Infrared based transmissive device software adjustable
Programmable delay performs skip-over function. Non-stop process with adaptive auto-detection built into the interface logic

Scanning Method: Concurrent Two-sided Duplex

Image Creation: 2 x 850 cell, 108mm CIS

Light Source: Tricolor LED

Endorser: Programmable ink jet, prior to scan, 12 dots/ch height
Variable fonts; supports graphical BMP printing

Estimated Yield: 5-7M characters

Cartridge: Hewlett Packard 6602A

In-Line MICR Recognition: MICR recognition firmware for

E13B (USA & UK), CMC7 (European), CMC0 standards

Magnetic MICR waveform passed to PC

MICR codeline data available as a separate file or in image header

MICR optical verification built into the interface

Transport Speed: 19.7" (50 cm) per second

Scanning Performance:

Model 65 – scans up to 65 six inch items per minute (15cm)

Model 100 – scans up to 100 six inch items per minute (15cm)

Scanning throughput depends upon scanning mode selected, interface, power of host computer (memory, processor, and disk drive write speed), use of simple or complex endorsements, and additional processing such as CAR or IQA

Full grayscale, using adaptive thresholding runs close to maximum rated speed

Standard Interface:

Standard USB2.0 (recommended)

Compatible with USB1.1 with performance limitations

Image Capture:

24-bit (16m shades) - color 8-bit (256 levels) - grayscale

1-bit black and white or 4-bit grayscale, software selectable through API

Image Resolution: 200 x 200 dpi (508 x 508 dots/cm)

100 x 100 dpi (254 x 254 dots/cm), 200 x 100 dpi (508 x 254 dots/cm)

(V x H) software selectable through AP

Image Formats & Compression:

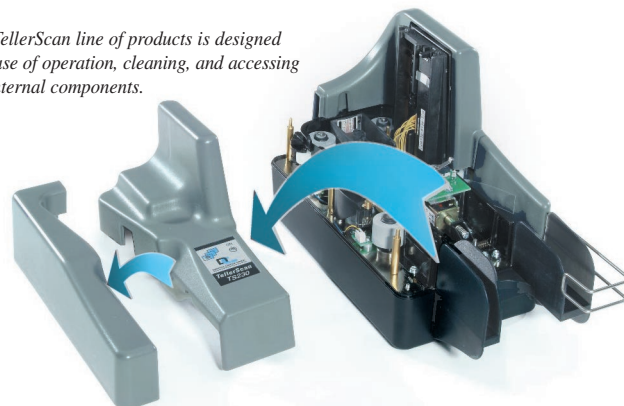
TIFF Gp/4, JPEG, or BMP via custom software running on workstation

Automatic image cropping

TELLERSCAN® 230

For Deposit Automation and Corporate Remote Deposit Applications

The TellerScan line of products is designed for ease of operation, cleaning, and accessing the internal components.



Diagnostic Features

Diagnostic Tools: Allows for full testing of scanner functionality

Serviceability: Flash EEPROM allows easy upgrade of functionality

Firmware

TS 230 firmware.bin with API 8.22 or later

(Firmware file resides on the local PC for easy remote update capability)

Software Tools & Support Services

Software Tools: API Toolkit 32 bit

Required Operating System: Windows 2000, Windows XP

Required DLL: TS2dll.dll which comes with API v 8.22 or later

Environmental, Reliability, & Electrical Features

Electrical: Power consumption: 45VA

Input Voltage: 100 to 240 VAC (+/- 10%), 50/60hz

Separate Standard Power Supply: Auto sensing for voltage

Product Life & Duty Cycle:

Designed for a useful life of over 5,000,000 items

Duty Cycle TS 230-65: 4,000 – 6,000 items per day

Duty Cycle TS 230-100: 6,000 – 8,000 items per day

Mean Time To Repair (MTTR): 15 minutes

Environmental:

Temperature (operating): 60° - 90° F (15° - 32° C)

Humidity (operating): 35-85% non-condensing

Unit Dimensions:

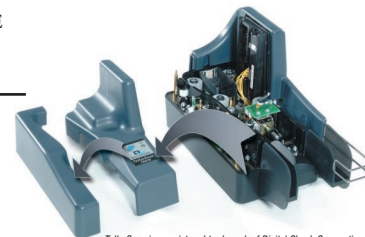
Height - 6.6" (17cm)

Depth - 5.1" (13cm)

Length - 8.6" (21.7cm)
(11" – 27.9cm incl. I/O trays)

Weight - 4.4 lbs. (2kg)

Certifications: UL, CE



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