

**Features:**

- Fast scanning speed: 100-120 dpm
- 100 item, jam-resistant feeder
- Two large output pockets
- Endorse before scanning for Check 21
- Fourth generation product, built upon reliable ergonomic design
- Industry leader in image quality
- Improved Best Read® MICR for maximum MICR accuracy
- Easy integration — common API and remote support

**Countertop scanning**

Digital Check Corporation's successful and highly reliable TellerScan brand of check scanners welcomes the latest enhancement of back office products to the market. The TellerScan TS 4120 is a fourth generation design that embodies the most advanced technology for distributed check capture today. The TS 4120's quiet operation is ideal for back office production scanning – with speeds between 100-120 checks per minute, depending on the application.

Financial institutions challenged Digital Check to manufacture a scanner which meets their real-world requirements of speed, reliability, and quietness while maintaining Check 21 image clearing requirements. With its small footprint, short U-shaped transport path, and double-pocket exit trays, the TS 4120 provides smooth operation for optimal feeding and the highest reliability. The TS 4120's special exit pocket tabs keep batches of checks in order, including both 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 if an actual piggyback were to ever occur it would be caught.

Because of Digital Check's experience in engineering and manufacturing refinements, the TS 4120 offers an attractive purchase price – making this Digital Check's best value in back office check scanners to date.

**When quality is paramount**

Digital Check's reputation for providing the best image quality is a key factor in TellerScan's leadership in both branch automation and remote deposit installations. Digital Check's scanners are used by major US banks and Treasury Management corporate customers to scan millions of items per month.

The TS 4120's unique 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, 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 4120 advances Digital Check'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**

Digital Check's scanners 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.

## Check 21 friendly

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 Hewlett Packard 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.

## TellerScan 4120 Specifications

**Speed:** 100-120 items per minute

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

**Paper Size:** (Up to UNI A6)

**Document Height:** 2.16" - 4.13" (55-105mm)

**Document Length:** 3.25" - 9.0" (75-230mm)

**Document Weight:** 16-32 lb. (60-120 grams/sq. meters)

**Motorized Autofeeder Capacity:** 1-100 items continuous feed (up to 100 items, depending on document thickness and condition)

**Output Pockets:** 2 pockets come standard. Software selectable sorting  
Approximately 80-100 item capacity per pocket

**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 inkjet, 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.

MICR is available sooner than image, making the sorting process quicker

**Transport Speed:** 19.7" (50 cm) per second

**Scanning Performance:** 100-120 6" (15cm) items per minute. 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 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 API

### Image Formats & Compression:

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

Automatic image cropping

### Diagnostic Features

**Diagnostic Tools:** Allows for full testing of scanner functionality

**Serviceability:** Firmware can be updated across the network to allow easy upgrade of functionality

### Firmware

TS 4120 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

**Recommended PC Configuration:** 2 GHz, 500 MB RAM

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

### Environmental, Reliability, & Electrical Features

**Electrical:** Power consumption: 65 Watts

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

**Separate Standard Power Supply:** Auto sensing for voltage

### Product Life & Duty Cycle:

**Product Life:** Designed for a useful life of over 20,000,000 items

**Duty Cycle:** 8,000 - 12,000 items per day

**Mean Time To Repair (MTTR):** 30 minutes

### Environmental:

**Temp. (operating):** 60° - 90° F (15° - 32° C)

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

### Unit Dimensions:

**Height:** 7.5" (19cm)

**Depth:** 7.25" (18.5cm)

**Length:** 12.75" (32.5cm)

**Weight:** 9.75 lbs. (4.4kg)

**Certifications:** UL, CE, FCC



*The TS 4120 has enhanced exit pocket trays*



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