iNSIGHT™ 4ES
OMR and Image Scanner

SCANTRON®

System Solutions

Reliability You Need – From The Company You Trust.

Trust the Scantron family of high precision data collection tools, with their proven OMR and image capture features, to meet your data management needs. The iNSIGHT 4ES optical mark recognition (OMR) and image scanner is one of the most versatile and efficient desktop scanners available for automated data collection.

The scanner's powerful processor delivers fast document throughput and provides a complete solution with a variety of off-the-shelf and custom software packages.

The Power of Multiple Data Collection Capabilities

The iNSIGHT 4ES offers you all the robust capabilities of optical mark recognition (OMR) technology—plus a wealth of expanded functions through image capture. The iNSIGHT 4ES scanner accurately scans an OMR form for written pencil and pen marks (such as bubbles, check marks, tick marks) and bar codes, giving you the most precise and effective data available.

This scanner also adds the power and flexibility of image capture. The iNSIGHT 4ES captures both full page images or image clips of text areas or text boxes, such as essay responses on a test or comment fields on a survey. This dynamic scanner can meet all your data collection needs today and in the future.

Options

- Programmable interactive printer(s) that print information on the sheet being scanned based on the scanned data. The printer(s) can print error codes, alphanumeric messages, serial numbers, validation flags, and test scores with no effect on the throughput rate.
- Bar code reader - reads bar codes in ladder format.
- SelfScore option allows operation without connection to a host computer with test scoring, survey, and ballot capabilities
- Select Stacker allows separate stacking of sheets based on criteria selected in your scanning software.
- Optional RealTime Character Recognition utilizing NestorReader™ software allows processing of machine and hand print data.

Technical Specifications

Physical Description	Length: 21.25" Width: 14.5" Height: 9" Weight: 17 lbs
Environment	Operating Temperature: 60° to 85°F (16°C to 29°C) Humidity: 40% to 60%, non-condensating
Power	100-240 volt operation: 100-240 volts AC (-10%, +6%): 50-60 Hz; US 3-prong plug; 15 amp dedicated circuit
Communications	USB: Version 2.0 is required
Operation	• Dual Read Heads: 200 dots per inch (dpi) resolution, up to 256 levels of grayscale per pixel; pencil and ink read capabilities • Pencil or ink forms may be used • Scanning Rate: 2,800 sheets per hour in OMR mode, 2,300 sheets per hour in OMR with imaging mode. • Forms: 2.5" x 5" to 9" x 14" (60-100 lb. Offset). Uses both Mark Reflex B and Trans-Optic® forms • Form Input Capacity: Auto-feed, 100 sheets • Output Stacker Capacity: 100 sheets main stacker, 100 sheets select stacker (if present) • Controls: Two Push button programmable switches • Message Display: 40 character, alphanumeric • Multi-feed detection • Integrated ES/ScanMark™ Emulation Mode
Options	• A programmable interactive printer • Select stacker separates forms that fail edit checks • Bar code reader • SelfScore® option for classroom test scoring and surveys

Product information subject to change without notice.

ENERGY STAR

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iNSIGHT™20
Document Scanner

System Solutions

The Next Step In The Evolution

The iNSIGHT™ 20 from Scantron® is a compact, affordable desktop model scanner that combines document imaging technology along with the proven data collection capabilities and accuracy of optical mark recognition (OMR). The iNSIGHT 20 is an industry exclusive scanner. Scantron applied over fifty years of engineering, forms design, applications development and customer support experience to ensure our customers' success. Whenever you need a reasonably priced and compact scanner that has the accuracy of OMR and the productivity and flexibility of Document Imagining, the iNSIGHT 20 is the right solution for you.

Meeting Your Document Imaging and OMR Needs

Due to its unique blend of capabilities, the iNSIGHT 20 is well priced and perfectly positioned to address applications such as testing, surveys attendance, grading, student portfolios, personnel records, archival, and general back file conversions. Depending on your requirements and budget, Scantron can meet the needs of your application. For higher-volume processing needs, Scantron also offers the iNSIGHT 30, which also combines full document imaging with the accuracy of OMR.

General Specifications

Scanning Technology	Dual CCD/Grayscale output bit depth is 256 levels (8-bit), Color capture bit depth is 48 bits (16 x 3), Color output bit depth is 24 bits (8 x 3).
Optical Resolution	600 dpi
Multi-feed Detection	With ultrasonic technology
Connectivity	USB 2.0
Bundled Software	TWAIN Drivers; Click & Scan; ScanTools Plus
Electrical Requirements	100-240 V (International); 50/60 Hz; Universal power supply included
Power Consumption	Sleep Mode < 6 watts, Running: < 35 watts
Environmental Factors	Energy Star qualified scanner; Operating temperature: 15-35° C (59-95° F); Operating humidity: 15-76 percent relative humidity
Acoustical Noise (operator position sound pressure level)	Standby mode: <32 dB(A); Operating mode: <65 dB(A)
Physical Description	30"x 13" x 10.75" operational, 6.5"x 13"X, 9.5" storage foot print, Weight: 16.5 lbs
Recommended PC Configuration	For documents up to 356 mm (14 in.) long at 400 dpi: Pentium 4, 3.2 GHz processor, 512 MB RAM For documents up to 660 mm (26 in.) long at 400 dpi: Pentium 4, 3.2 GHz processor, 1 GB RAM For longer documents/higher resolutions: Pentium 4, 3.2 GHz processor, 3 GB RAM
Supported Operating Systems	Windows XP SP2; Windows Vista (32-bit)

Data Collection Specification

Throughput	Up to 1800 Sheets per hour
Read Heads	200 dpi resolution, up to 256 levels of grayscale per pixel; pencil and ink read capabilities
Forms	2.5" x 5.5" to 8.5" x 14" (60-100 lb. Offset), Uses both Mark Reflex and Trans-Optic forms; Pencil and ink forms may be used
Feeder Capacity	40 sheets, 90 g/m2 (24 lb bond, 60 lb Offset)
Spacing's supported	.166, .166 48 cell, .200 inline, .200 offset, .200 line read, and .300 line read
Barcode	Standard - Software read through ScanTools
Bundled Software	ScanTools Plus

Document Imaging Specifications

Throughput (200 dpi, landscape, letter size, black and white/grayscale/color)	Up to 30 page per minute/ 60 images per minute
Image output	Black and white, grayscale (8 bit), color (24 bit)
Output resolution	75, 100, 150, 200, 240, 300, 400, 600 and 1200 dpi
Maximum document size	216 mm x 863 mm (8.5 in. x 34 in.)
Minimum document size	64 mm x 89 mm (2.5 in. x 3.5 in.)
Paper Thickness and Weight	34-413 g/m2 9-110 lb.) paper
Feeder Capacity	Up to 70sheets of 60 g/m² (16 lb.) paper
Bundled Software	TWAIN driver, Click & Scan
File Format Outputs	Single and multi-page TIFF, JPEG, RTF, PDF

WE SELL ENERGY STAR

SCANTRON®

*i*NSIGHT™ 150
OMR and Image Scanner

System Solutions

Smarter Imaging Technology Solution

- High speed, flexible data collection
- Best performance for the price
- Accuracy you can rely on

When you need to collect vast amounts of data quickly and it must be accurate turn to the *i*NSIGHT™ 150 scanner as the smart technology answer. The *i*NSIGHT™ 150 scanner from Scantron provides high performance and interprets Optical Mark Recognition (OMR), hand and machine printed characters, bar code, mark sense and more. Whether you need to collect constructed responses in test scoring and survey processing or other critical applications, you can rely on our high standards for accuracy. We have manufactured trusted scanning systems for more than 50 years.

Meets High Volume Needs

The iNSIGHT 150 system supports automated data capture applications that demand critical accuracy and high production throughput levels. It delivers unparalleled speed in the collection of data, which helps reduce capital investment and improves data turnaround time. This latest addition to our iNSIGHT image-based scanner family provides the best performance for the price in the industry.

Captures Data and Entire Form Image

Easy to operate, the iNSIGHT 150 scanner includes two built-in read modes: one for reading pencil marks and one for reading marks made with blue or black ink. An open feed path provides sheet visibility at all times as well as easy access for sheet removal and transport cleaning. Scanner diagnostic software quickly pinpoints any operational problem. Any previous software applications developed for the OpScan® 2/3/4/4XP/4U scanners are plug and play compatible with the iNSIGHT 150 scanner.

Reads Both Hand Print and Machine Print Characters

The iNSIGHT 150 system interprets OMR, hand and machine printed characters, bar code, mark sense, and binary coded numbers. For example, student ID numbers and social security numbers can be pre-printed on data collection forms, reducing errors and saving data entry time. Because scan forms no longer require large OMR grids—more design space is available on the form.

Helps Ensure Accuracy

The technologies used in the iNSIGHT 150 system help you meet accuracy standards with the least amount of effort on your part:

- Picture Perfect™ feature - helps ensure that hand and machine print characters are quickly, and accurately interpreted by minimizing the effects of mechanical distortions.
- Image Quality Sentry™ feature - helps avoid the accumulation of inferior quality images.
- Quick Check feature - gives users an easy-to-use pass/fail test that validates the scanner's mechanical integrity.

Unlike other "picture taking" image scanners, both the Picture Perfect and Image Quality Sentry features operate as each sheet is scanned. These features are transparent to the user, and improve the accuracy of data without slowing the scanning process.

Fast and Productive

The iNSIGHT 150 system gives you the fast processing speed you need, with up to 250 pages per minute, depending on the recognition method you choose. Many tasks are performed during scanning, and as a result, minimizes costly errors and speeds total production time:

- Dynamic Deskew™ and Image Skew Sentinel features reduce the occurrence of sheet skew errors.
- Graybox Search feature option processes only fields that contain data. Or, it can isolate forms that are missing critical fields, such as a signature.

- Optical character recognition (OCR) increases data productivity by reading pre-printed characters while scanning in real time. This avoids the need for pre-slugging data and saves valuable space on the form.

Compatible with Popular Software Applications

Included with every iNSIGHT 150 system is ScanTools® Plus utility software for developing scannable forms applications. In addition, the system outputs industry standard image formats, which are fully compatible with most archival/retrieval systems and software applications. ScanTools Plus software verifies booklet identification and sheet sequence as each sheet passes through the scanner— another fail-safe to help ensure that the highest quality data is captured.

Choose from a Variety of Data Collection Methods

With the iNSIGHT 150 system, you choose the methods of data collection that best meet your needs:

- 16-level OMR mark discrimination evaluates the relative darkness of OMR "bubble" responses and discriminates between smudges and erasures and valid marks
- Mark sense read (X, check and tick marks)
- Hand print and machine print characters interpreted and converted to ASCII data
- Bar code
- Graybox Search (there/not there)
- Key from image (for open-ended responses)

- Score from image (essays)
- Grayscale image capture for viewing drawings, photographs, and signatures
- Dropout colors to enable both pencil and ink read capabilities

Installation, Maintenance and Support are Nearby

We provide nationwide, on-site maintenance from many locations. Our experienced support organization provides professional services:

- System design, integration, implementation
- Custom programming
- User and system training
- On-site maintenance
- Software support

Contact us at 800.447.3269 to find out how the iNSIGHT 150 system can meet your critical application needs.

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