



PAGE VERIFICATION SYSTEM

Optical Page Scanner for the Printing Industry

Page Verification System (PVS) from Vision Machines provides fast and accurate identification of printed pages on all types of media. PVS continually scans pages and immediately alerts operators and connected devices in the event of an incorrect or defective page. Operating at speeds of over 11,000 pages per hour, PVS handles printed text, graphics, and photos in black and white or color. Each PVS unit is a self-contained vision system, with a dedicated processor and no external computer. PVS units may be networked for remote access and contain digital I/Os for direct connection to other factory automation devices. Setup is simple—just scan several pages at the start of each new job and you're ready to inspect!



PVS installs easily on saddle stitching, binding, collating and many other machines, making it the ideal solution for all signature recognition applications.

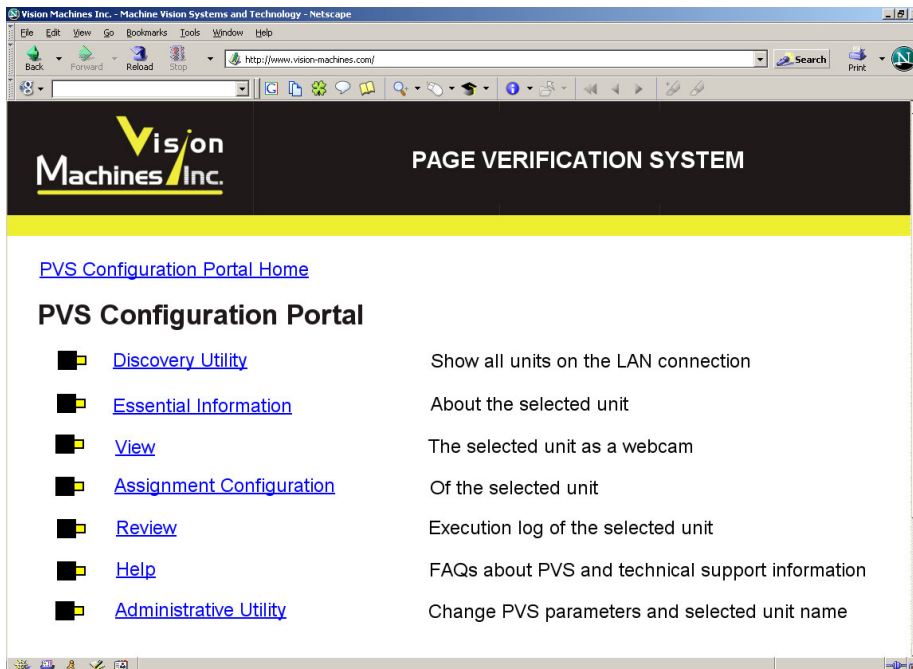
SPECIFICATIONS

Camera	Programmable compact vision camera
Processor	Embedded Intel CPU, Windows CE .NET real-time operating system
Computer	Optional Windows PC with standard or touchscreen display (network mode only)
Optics	8 mm CS-mount lens
Lighting	High-intensity, red LED illuminator, continuous or strobed operation, 100,000 hours rated lifetime
Camera Sensor	1/4" progressive scan CCD with square pixels, color or monochrome
Resolution	640 x 480 pixels
Frame Rate	30 frames per second maximum
Page Sensor	Photoelectric part-in-place sensor
I/O	10/100 Mbit Ethernet, RS-232 serial, 8 digital inputs, 8 digital outputs
Page Scan Speed	> 11,000 pages per hour
Paper Size	3 x 4 in to 11 x 17 in
Coverage Area	3.2 x 2.4 inches per frame
Scanning Tolerances	± 10 mm translation, ± 6° rotation
Power Consumption	0.3 A @ 24 VDC or 7W
Digital I/O Ratings	400 mA max @ 5 to 24 VDC
Temperature Ratings	0 °C to 40 °C (32 °F to 104 °F)
Dimensions	6.1 x 2.4 x 1.9 inches (L, W, D) excluding lens and illuminator
Weight	13.2 oz excluding lens and illuminator
Connectors	RJ-45 for power and RS-232, RJ-45 for Ethernet and DB-25 for digital I/Os
Standoff Distance	Approximately 10 inches
Mounting	Universal mounting bracket, adjustable camera position
Remote Access	Web-based configuration and monitoring capability
Reprogrammable	Yes

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Key Features

- Suitable for stitching, binding, folding, collating and other machines
- Optical page scanning via programmable vision camera
- Signature recognition detects incorrect, defective, and blank pages
- CCD progressive-scan technology for high quality imaging
- Black and white or color processing
- High-speed operation to over 11,000 pages per hour
- Dedicated camera/processor for each station
- No PC or external processing units required!
- Easy configuration and user interface
- Automatic training at job startup
- Handles positioning errors to ± 10 mm and rotation errors to $\pm 6^\circ$
- Adjustable tolerances for normal page deviations
- Networked cameras allow remote configuration and monitoring over Internet
- Digital I/Os for connection to factory automation devices
- Small footprint 6.1" x 2.4" x 1.9"
- Adjustable mounting permits variable image capture area
- Low maintenance, no moving parts, lamp lifetime 100,000 hours
- Reprogrammable for additional features or other applications



Browser screen showing web-based configuration and monitoring