JADE™ X7

DATALOGIC

HIGH PERFORMANCE AUTOMATED IMAGING PORTAL SCANNER

The Jade™ X7 portal scanner from Datalogic is the world's first high-performance, all-digital, imaging scanner designed to be easily integrated into a fully automated checkout system.

The Jade™ X7 scanner takes advantage of the latest digital imaging technology and has a modern, award winning design, which allows an automated scanning solution to have an open and minimalistic appearance.

Automated scanning systems set a new standard for high throughput, hands-free scanning. To achieve these revolutionary results at the front-end checkout, items are placed on a moving belt in any orientation. As items move through the Jade X7 portal scanner, bar codes are read on all sides of the item including the bottom. The advanced data capture functionality of the Jade X7 scanner also identifies items without readable bar codes by providing full color annotated images. Advanced sensors measure the speed, shape and position of the items. The JadeAssist software uses this data to help indicate if items are stacked on top of each other.

INTELLIGENT IMAGING

Powered by multiple ARM microprocessors, the Jade™ X7 portal scanner captures and processes images at an exceptionally fast rate while handling other peripheral operations with ease. Performance is further maximized by the use of strategically placed megapixel digital imagers and the Datalogic patented Illumix™ illumination technology, to deliver high speed stop-action imaging.

In addition to reading bar codes through digital imaging, the Jade™ X7 scanner also is able to identify items using integrated ViPR® (visual object recognition) technology and JadeASSIST software to further increase the first pass capture rate of the scanner.



FEATURES

- Advanced digital imaging in all six planes
- Item identification using integrated ViPR® technology identifies items with hard-to-read bar codes
- Seamless reading of all bar codes with integrated good-read audio and visual confirmation
- Host-controlled visual and audible confirmation with customizable WAV files
- Color VGA touch panel
- Large portal opening to accommodate oversized items
- Award winning industrial design
- Works with belt speeds up to 34 cm/second or 67 ft/minute
- Identifies unique items even if spaced very close in any position on moving belt
- Optional DLC glass belt transition plate and check stand mounting kit
- Self-diagnostic service and repair features
- In-counter service and repair strategy
- Remote update capabilities
- Optional Digimarc® Barcode Reading

SYSTEM INTEGRATION

The Jade X7 portal scanner is designed to be easily integrated into a complete automated scanning solution.

MECHANICAL INTEGRATION

- Designed for simple mechanical integration into various check stand designs. This integration allows for easy and fast installation and service of the unit. The optional transition plate and mounting kit provides a smooth and reliable transition between the entry and exit belts of the check stand.

SOFTWARE INTEGRATION

- A detailed Host Interface Specification is available that outlines the specifics of the software integration. The software interface provides for advanced remote configurations and diagnostics of the unit. The Host interface also supports ViPR object recognition within the Jade unit.

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TECHNICAL SPECIFICATIONS

DECODING CAPABILITY

1D / LINEAR CODES	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes.
STACKED CODES	EAN/JAN Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional
DIGITAL WATERMARKS	Optional support for Digimarc® Barcode

ELECTRICAL

AC POWER REQUIREMENTS	AC Input: 100 - 240 VAC, 50-60 Hz Power Consumption: Operating: 130 -150 Watts Maximum: 160 Watts Max, 1.75 A Sleep Mode: 84 Watts

ENVIRONMENTAL

AMBIENT LIGHT	0-86,000 lux
HUMIDITY (NON-CONDENSING)	5 - 95%
ESD PROTECTION (AIR DISCHARGE)	25kV
TEMPERATURE	Operating: 10 to 40 °C / 50 to 104 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

INTERFACES

INTERFACE	8P8C Modular Connector Socket, TIA/EIA-568-C, Ethernet IEEE 802.3, 1000BASE-T/100BASE-TX

OPTIONAL FEATURES

BELT GAP TRANSITION PLATE	Diamond-Like Carbon (DLC) Glass: High transmissivity glass optimized for imaging performance Belt Gap Transition Plate Mounting Kit: Adjustable transition plate mounting brackets with integrated sensors for transition plate switch

PHYSICAL CHARACTERISTICS

DIMENSIONS	**Above the Conveyor Belt:** Height: 71.0 cm / 28.0 in Length: 86.0 cm / 34.0 in Width: 69.0 cm / 27.0 in **Below the Conveyor Belt:** Height: 38.0 cm / 15.0 in Length: 81.0 cm / 32.0 in Width: 48.0 cm / 19.0 in Portal Opening: 43.0 cm x 43.0 cm / 17.0 in x 17.0 in
INDICATORS	Audio: Adjustable Tone and Volume; Line-out stereo signal for remote powered speakers; WAV file format Visual: Integrated multicolor indicator (2x) I/o port for remote multicolor indictors (audible and visual indication can be activated via host commands) User Interface: VGA color touch panel display

READING PERFORMANCE

READING COVERAGE	Seamless reading of all unique bar codes on items from all six sides; Item identification using integrated ViPR® (visual object recognition) technology and JadeASSIST software
ITEM SPACING	2.5 cm / 1.0 in minimum spacing in any direction for unique item identification 10.0 cm / 4.0 in minimum spacing in any direction for optimal reading
BELT SPEED	Minimum: 200 mm per second / 40 ft per minute Maximum: 340 mm per second / 67 ft per minute
DATA CAPTURE	SXGA color images of items; Annotation of individual items within the image; Velocity measurement of items; Height, width and length of items; Volume checking to identify stacked items; Self-learning of item volumes and images for object recognition

SAFETY & REGULATORY

AGENCY APPROVALS	The product meets necessary safety and regulatory approvals for its intended use. The Quick Reference Guide for this product can be referred to for a complete list of certifications.
EMISSIONS	FCC, Class A, Emissions USA; EN 55022 (Class A)
ENVIRONMENTAL COMPLIANCE	Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. - EC1907/2006
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam; EN 60825 Class 1; IEC 60825 Class 1
LED CLASS	IEC 62471-1: 2007 Risk Group 1
SAFETY	UL/CSA Bi-national standard UL60950-1 2nd edition; European Norm EN60950-1:2011/A12 and IEC60950-1 2nd Edition

UTILITIES

JADE TEST	Software Utility for testing, calibration and configuration.
JAVAPOS	JavaPOS Utilities are available for download at no charge.

VALUE ADDED FEATURES

JADE PERFORMANCE REPORTING	Captures label and item data statistics by lane using JadeASSIST software

WARRANTY

WARRANTY	1-Year Factory Warranty

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