



# 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 stopaction 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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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

**ENVIRONMENTAL** 

AMBIENT LIGHT **HUMIDITY (NON-CONDENSING) ESD PROTECTION (AIR DISCHARGE)** TEMPERATURE

0-86,000 lux 5 - 95% 25kV

Sleep Mode: 84 Watts

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/FIA-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

**INDICATORS** 

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 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** 

ITEM SPACING

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

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

IEC 62471-1: 2007 Risk Group 1 LED CLASS UL/CSA Bi-national standard UL60950-1 2nd SAFETY

edition; European Norm EN60950-1:2011/A12

and IEC60950-1 2nd Edition

UTILITIES

Software Utility for testing, calibration and JADE TEST

configuration

**JAVAPOS** JavaPOS Utilities are available for download at no

**VALUE ADDED FEATURES** 

JADE PERFORMANCE REPORTING Captures label and item data statistics by lane

using JadeASSIST software

WARRANTY

WARRANTY 1-Year Factory Warranty

