

# Lynx™

## Hand-Held 2D Reader



## General Description

Datalogic, the leading European manufacturer of Hand-Held CCD and Laser readers, is continuously investing in 2D technology. The latest addition is the Lynx™ D432, available in two new models for standard and high resolution codes.

The Lynx™ family performs “omnidirectional” reading on a wide range of symbologies from the most common 1D and 2D codes to stacked and postal codes, improving productivity and efficiency in any application. In fact, with the Lynx™ the user captures the whole image of the object to be identified no matter how it is orientated, thus avoiding any alignment constraint between the reader and the symbol to be read. Furthermore, the Lynx™ D432 can be used for “image-based” applications like signature capture, OCR and so on.

The captured image can be processed on board, or downloaded in different formats (.bmp, .jpg, .tif) for image processing on the host side. Also, the new image capture function allows complete image management. Up to 4 acquisition options allow image manipulation: zoom (from 20% to 200%), contrast, brightness ( $\pm 100\%$ ) and windowing. Aiming at the image to be captured is very easy and intuitive thanks to the “double-click” trigger for Point & Read, and to the “five dot pointer” that marks the four corners and center of the reading area.

All models are equipped with a multi-standard interface for connection to the host via USB (COM and wedge emulation), RS232 or Wedge emulation interface.

Finally, the VisualSetup™ software tool included in the Lynx™ package allows easy configuration of all the parameters to personalize the reader for any application, as well as a quick view of the downloaded images.

## Features

- > Omni-directional scanning
- > Supports most popular 1D, 2D, Stacked and Postal codes
- > Advanced image capture
- > Standard and high resolution models
- > Intuitive aiming
- > Multi-standard interface: USB RS232, Wedge AT IBM
- > Robustness: 1.8 drop resistance
- > Visual Setup™ software tool included in the package
- > Sunrise 2005 compliant

## Applications

- > Shop floor:
  - WIP
  - Tracking
  - Quality Control
- > Document handling:
  - Front-Desk/Postal applications
  - Shipping & Receiving

## Specifications

### ELECTRICAL CHARACTERISTICS

POWER SUPPLY 10 to 30 VDC  
 CONSUMPTION 110 mA @ 12V (Stand-by)  
 245 mA @ 12V (Typical)  
 305 mA @ 10V (Peak current)

### OPTICAL CHARACTERISTICS

SENSOR 640 x 480 pixel element, 2D CMOS Array  
 IMAGE AND 640 x 480 VGA (8 bit gray scale)  
 SIGNATURE CAPTURE 320 x 240 CIF (8 bit gray scale)  
 AIMING Visible laser diode @ 650 nm

### MECHANICAL CHARACTERISTICS

DIMENSIONS 203 x 117.2 x 68.9 mm  
 WEIGHT 265 g (without cable)

### PERFORMANCE

MAX. RESOLUTION Linear: 4 mils ; Datamatrix 6.6 mils (Lynx™ D432)  
 Linear: 2 mils; Datamatrix: 4 mils (Lynx™ D432-E)  
 READING FIELD 21.8° (H) x 16.7° (V): Lynx™ D432  
 20° (H) x 15° (V): Lynx™ D432-E  
 PRINT CONTRAST VALUE (min.) PCS=23% (Lynx™ D432); PCS=27% (Lynx™ D432-E)  
 READING ANGLE  
 Skew ±40° (Lynx D432); ±60° (Lynx™ D432-E)  
 Pitch ±35° (Lynx™ D432); ±50° (Lynx™ D432-E)  
 Tilt 360°

GRAPHIC FORMATS .bmp, .jpg, .tif;  
 gray levels: 256, 16, 2

CODES  
 1D Codes Interleaved 2/5, Code 39, Code 32,  
 Code 128, EAN 128, Code 93,  
 UPC/EAN/JAN, Codabar, RSS  
 2D codes PDF417, DataMatrix (ECC200),  
 QR, Composite Code, MicroPDF,  
 MacroPDF, Maxicode  
 Postal codes POSTNET, PLANET, Japan Post,  
 Australia Post, KIX Code,  
 Royal Mail Code (RM4SCC)

INTERFACES RS232, Wedge AT IBM; USB  
 (COM and Wedge  
 emulation)

LASER CLASSIFICATION Class 2 (IEC 825-1 and CDRH)

**ENVIRONMENT**  
 AMBIENT LIGHT 0 to 100,000 lux  
 IMMUNITY  
 OPERATING TEMP. 0 to 55 °C  
 STORAGE TEMP. -20 to 70 °C  
 HUMIDITY 0 to 95% non condensing  
 DROP RESISTANCE 1.8 m multiple drops

## Reading Characteristics

LYNX™ D432	1D CODE	DEPTH OF FIELD	LYNX™ D432	2D CODE (cont.)	DEPTH OF FIELD	LYNX™ D432-E	1D CODE	DEPTH OF FIELD
	Code 39 5 mils	80 to 150 mm		PDF417 10 mils	45 to 240 mm		Code 39 3 mils	50 to 75 mm
	Code 39 20 mils	80 to 330 mm		Datamatrix 7.5 mils	90 to 130 mm		Code 39 5 mils	40 to 95 mm
	EAN13 13 mils	75 to 245 mm		Datamatrix 10 mils	75 to 165 mm	<b>LYNX™ D432-E</b>	<b>2D CODE</b>	<b>DEPTH OF FIELD</b>
<b>LYNX™ D432</b>	<b>2D CODE</b>	<b>DEPTH OF FIELD</b>		Datamatrix 15 mils	60 to 220 mm		PDF417 3 mils	50 to 80 mm
	POSTNET 20 mils	115 to 300 mm					PDF417 10 mils	40 to 130 mm
	PDF417 5 mils	85 to 155 mm					Datamatrix 5 mils	50 to 75 mm
	PDF417 6.6 mils	70 to 190 mm					Datamatrix 10 mils	45 to 105 mm

## Accessories



Stand



Universal Holster



Protective case



Desk/Wall Holder

### Stand

Robust and compact, the stand makes it possible to use the reader in a hands-free mode.

### Universal Holster

It is designed to offer a robust and handy way to attach the readers to desktops, work-tables, forklift trucks, and other types of supports.

### Protective case - Belt coupler

This permits the reader to be carried on a belt when not in use and protects it against drops.

### Desk/Wall Holder

The Desk/Wall Holder provides ease of use and flexibility in many environments where work-space is limited.