

# PowerScan® 8500

## Industrial Handheld 2D Imaging Bar Code Reader



**PowerScan®**

## General Description

Datalogic Scanning's PowerScan readers are the top rated industrial handheld data collection products on the market. Long known for outstanding durability and performance, the PowerScan brand of products continues to offer the ultimate solution for demanding industrial applications.

The PowerScan 8500 reader offers the richest feature set of Datalogic Scanning's industrial handheld products for the omni-directional reading of one-dimensional (1D) and reading of two-dimensional (2D) codes as well as the capability of multiple code reading in a single read.

The PowerScan 8500 readers' high resolution Mega-Pixel sensor (1280 x 1024 pixels) is capable of outstanding performance in all conditions. It is offered in 3 models: the Standard and High Density models are for typical bar code reading conditions (for medium and high resolution code respectively) and the Wide Angle model offers a wider field of view allowing the capture of larger and longer bar codes as well as a full A4 (11.42 x 8.27 in / 29 x 21 cm) image capture.

Easy to use and install, the PowerScan 8500 readers are equipped with a built-in multi-interface including RS-232, Keyboard Wedge and USB. It has a stainless steel tether hook and a full set of accessories are available to organize the workplace for optimum efficiency. The Datalogic Aladdin™ software configuration program provides user-friendly features that simplify the start-up procedure, even for inexperienced users.

Operator comfort and productivity, essential for scan-intensive applications, is made simple by the PowerScan 8500 reader's ergonomic handle, well-balanced weight, and Datalogic's 3 Green Lights (3GL™) feature for superior 'good read' feedback including Datalogic's patented "green-spot" on the bar code.

The PowerScan 8500 reader's IP65 rating for dust and water sealing provide the complete protection needed in harsh environments. Offering maximum reading performance in temperatures that range from 14 to 122 °F / -10 to +55 °C, it is guaranteed to provide the highest productivity even in the most demanding conditions.

[www.scanning.datalogic.com](http://www.scanning.datalogic.com)

## Features

- > Omni-directional reading
- > Supports most popular 1D, 2D, Stacked and Postal codes
- > Intuitive "5 dots" aiming
- > Standard, High Density and Wide Angle optics
- > From contact to 11.81 in / 30 cm reading range
- > User interface: loud beeper and Datalogic's 3GL™ 'good read' feedback
- > 6.6 ft / 2 m drop resistance, IP65 sealed

## Applications

- > Shop Floor:
  - Work-in-progress Tracking
  - Quality control
  - Monitoring and reporting
  - Line inventory
- > Document Handling:
  - Front-Desk/Postal
  - Shipping/Receiving management
- > Transportation & Logistics:
  - Incoming/outgoing parcels
  - Tracking
  - Sorting
  - Conveyor end of line

### Specifications

#### OPTICAL CHARACTERISTICS

SENSOR 1280 x 1024 pixels  
 LIGHT SOURCE LED array  
 WAVELENGTH 630 - 670 nm  
 AIMING Visible Laser Diode (VLD) @ 650 nm  
 CAPTURED AREA HIGH DENSITY: 3.4 x 2.7 in / 87 x 69 mm  
 @150mm / 5.9 in STANDARD: 3.7 x 3 in / 94 x 75 mm  
 WIDE ANGLE: 7.7 x 6.3 in / 197 x 160 mm

#### ELECTRICAL CHARACTERISTICS

OPERATING VOLTAGE 5 - 30 VDC  
 POWER CONSUMPTION 2.9 W (max)  
 OPERATING CURRENT 550 mA @ 5 VDC (typical)  
 95 mA @ 30 VDC (typical)

#### MECHANICAL CHARACTERISTICS

DIMENSIONS 8.1 x 2.6 x 4.3 in / 20.8 x 6.6 x 11 cm  
 WEIGHT 10.4 oz / 295 g (without cable)

#### ENVIRONMENTAL CHARACTERISTICS

AMBIENT LIGHT IMMUNITY 100,000 Lux  
 OPERATING TEMPERATURE 14 to 122 °F / -10 to 55 °C  
 STORAGE TEMPERATURE -4 to 158 °F / -20 to 70 °C  
 HUMIDITY (non condensing) 0 to 95%  
 DROP RESISTANCE 6.6 ft / 2 m (over 50 drops to concrete)  
 ENVIRONMENTAL PROTECTION IP65

#### PERFORMANCE

MAX RESOLUTION 1D: 2 mils; PDF417: 3 mil; 2D: 4 mils (High Density)  
 1D: 4 mils; PDF417: 4 mil; 2D: 6.6 mils (Standard)  
 1D: 5 mils; PDF417: 5 mil; 2D: 7.5 mils (Wide Angle)  
 PRINT CONTRAST RATIO (min) 15%  
 READING ANGLE Skew: +/-40°, Pitch: +/-35°, Tilt: 360°  
 BAR CODES 1D: Interleaved 2/5, Code 39, Code 32, Code 128, EAN 128, Code 93,  
 UPC/EAN/JAN, CODABAR, GS1 DataBar™ (formerly RSS)  
 2D: PDF417, Data Matrix (ECC200), QR (Quick Response), Composite Code,  
 MicroPDF, MacroPDF, MaxiCode, Aztec  
 Postal Codes: POSTNET, PLANET, Japan Post, Australia Post, KIX Code, Royal  
 Mail Code (RM45CC)

IMAGE FORMAT .jpg, .tif  
 INTERFACES RS-232, Keyboard Wedge, USB (COM and Keyboard Wedge Emulation)  
 READING INDICATORS 'Good read' green spot on the code,  
 'Good read' LED's (3GL™ Feedback);  
 Polyphonic Beepers  
 PROGRAMMING METHOD Manual: Via bar code menu  
 Automatic: Commands through  
 RS-232/USB COM  
 PC Tools: Datalogic Aladdin™

#### SAFETY & REGULATORY

ELECTRICAL Complies to C-CSA-US (60950 to Canada and USA)  
 EMISSIONS Complies to FCC-A, EN 55022-A, AS/NZS 3548  
 LASER CLASSIFICATION Class 2 (IEC 825-1 and CDRH) 

RESTRICTION OF HAZARDOUS SUBSTANCES (RoHS)

Complies with EU RoHS.



### Reading Characteristics

LABEL DENSITY	STANDARD OPTIC	HIGH DENSITY OPTIC	WIDE ANGLE OPTIC
Code 39 - 3 mil		1.7 - 3.1 in / 4,5 - 8 cm	
Code 39 - 5 mil	2.9 - 6.1 in / 7,5 - 15,5 cm	1.3 - 3.8 in / 3,5 - 9,5 cm	1 - 3.9 in / 2,5 - 10 cm
Code 39 - 10 mil	2.1 - 9.7 in / 5,5 - 24,5 cm	1.5 - 5 in / 4 - 12,5 cm	0.8 - 6.3 in / 2 - 16 cm
Code 39 - 20 mil	2.1 - 14.4 in / 5,5 - 36,5 cm	2.3 - 7.3 in / 6 - 18,5 cm	0.6 - 12.6 in / 1,5 - 32 cm
100% UPC - 13 mil	1.9 - 10.6 in / 5 - 27 cm	1.9 - 5.5 in / 5 - 14 cm	0.6 - 10.2 in / 1,5 - 26 cm
PDF417 - 3 mil		1.9 - 3.4 in / 5 - 8,5 cm	
PDF417 - 5 mil	3.1 - 7.3 in / 8 - 18,5 cm	1.7 - 3.4 in / 4,5 - 9,5 cm	1.2 - 4.1 in / 3 - 10,5 cm
PDF417 - 10 mil	1.5 - 10 in / 4 - 25,5 cm	1.1 - 5.2 in / 3 - 13 cm	0.6 - 8.4 in / 1,5 - 21,5 cm
Data Matrix - 4 mil		2 - 3 in / 5,1 - 7,6 cm	
Data Matrix - 5 mil		1.9 - 3.1 in / 5 - 8 cm	
Data Matrix - 7.5 mil	3.1 - 6.5 in / 8 - 16,5 cm	1.7 - 3.4 in / 4,5 - 9,5 cm	2.1 - 3.4 in / 5,5 - 8,5 cm
Data Matrix - 10 mil	2.7 - 7.7 in / 7 - 19,5 cm	1.5 - 4.1 in / 4 - 10,5 cm	1.2 - 4.9 in / 3,2 - 12,5 cm
QR - 7.5 mil	3.1 - 6.5 in / 8 - 16,5 cm	1.7 - 3.4 in / 4,5 - 9,5 cm	2.1 - 3.4 in / 5,5 - 8,5 cm
QR - 10 mil	2.7 - 7.7 in / 7 - 19,5 cm	1.5 - 4.1 in / 4 - 10,5 cm	1.2 - 4.9 in / 3 - 12,5 cm



**STD-8000 Hands-free Stand**  
 Allows use of the reader in hands-free mode.



**HLD-8000 Desk/Wall Holder**  
 Provides installation flexibility.



**PC-8000 Protective Case/Belt Holster**  
 Allows the reader to be worn on a belt.



**HLS-8000 Universal Holster**  
 Can be attached to desktops, work-tables, forklift trucks, etc.



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