PowerScan® 8500

Industrial Handheld 2D Imaging Bar Code Reader

**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 barcode 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 (29 x 21 cm / 11.42 x 8.27 in) 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 barcode.

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 -10 to 55 °C / 14 to 122 °F, it is guaranteed to provide the highest productivity even in the most demanding conditions.

**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 30 cm / 11.81 in reading range
- User interface: loud beeper and Datalogic’s 3GL™ ‘good read’ feedback
- 2 m / 6.6 ft 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

www.scanning.datalogic.com
PowerScan® 8500

Industrial Handheld 2D Imager

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: 87 x 69 mm / 3.4 x 2.7 in
STANDARD: 94 x 75 mm / 3.7 x 3 in
WIDE ANGLE: 197 x 160 mm / 7.7 x 6.3 in

ELECTRICAL CHARACTERISTICS

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

MECHANICAL CHARACTERISTICS

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

ENVIRONMENTAL CHARACTERISTICS

AMBIENT LIGHT IMMUNITY 100,000 Lux
OPERATING TEMPERATURE -10 to 55 ºC / 14 to 122 ºF
STORAGE TEMPERATURE -20 to 70 ºC / -4 to 158 ºF
HUMIDITY (non-condensing) 0 to 95%
DROP RESISTANCE 2 m / 6.6 ft (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, CODEBAR, GS1 DataBar™ (formerly RSS)
2D: PDF417, Data Matrix (ECC200), QR (Quick Response), Composite Code, MICROPDF, MatrixPDF, MaxiCode, Aztec
Postal Codes: POSTNET, PLANET, Japan Post, Australia Post, KIX Code, Royal Mail Code (RM45CC)

Reading Characteristics

<table>
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<tr>
<th>LABEL DENSITY</th>
<th>STANDARD OPTIC</th>
<th>HIGH DENSITY OPTIC</th>
<th>WIDE ANGLE OPTIC</th>
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</thead>
<tbody>
<tr>
<td>Code 39 - 3 mil</td>
<td>4.5 - 8 cm / 1.7 - 3.1 in</td>
<td>3.5 - 9.5 cm / 1.3 - 3.8 in</td>
<td>2.5 - 10 cm / 1 - 3.9 in</td>
</tr>
<tr>
<td>Code 39 - 5 mil</td>
<td>6 - 9 cm / 2.3 - 3.5 in</td>
<td>5 - 9.5 cm / 1.9 - 3.7 in</td>
<td>3.5 - 13 cm / 1.3 - 5.1 in</td>
</tr>
<tr>
<td>Code 39 - 10 mil</td>
<td>8 - 12 cm / 3 - 4.7 in</td>
<td>7.5 - 11 cm / 2.9 - 4.3 in</td>
<td>5.5 - 15 cm / 2.1 - 5.9 in</td>
</tr>
<tr>
<td>100% UPC - 13 mil</td>
<td>5 - 7 cm / 1.9 - 2.7 in</td>
<td>4.5 - 7 cm / 1.7 - 2.8 in</td>
<td>3 - 11 cm / 1.1 - 4.3 in</td>
</tr>
<tr>
<td>PDF417 - 3 mil</td>
<td>5 - 8 cm / 1.9 - 3.4 in</td>
<td>4.5 - 7 cm / 1.7 - 2.8 in</td>
<td>3 - 11 cm / 1.1 - 4.3 in</td>
</tr>
<tr>
<td>PDF417 - 5 mil</td>
<td>6 - 10 cm / 2.3 - 3.9 in</td>
<td>5 - 9.5 cm / 1.9 - 3.7 in</td>
<td>3.5 - 13 cm / 1.3 - 5.1 in</td>
</tr>
<tr>
<td>PDF417 - 10 mil</td>
<td>7 - 12 cm / 2.7 - 4.7 in</td>
<td>6 - 11 cm / 2.3 - 4.3 in</td>
<td>5.5 - 15 cm / 2.1 - 5.9 in</td>
</tr>
<tr>
<td>Data Matrix - 4 mil</td>
<td>5.5 - 7.6 cm / 2.2 - 3 in</td>
<td>5 - 8 cm / 1.9 - 3.1 in</td>
<td>3.5 - 11 cm / 1.3 - 4.3 in</td>
</tr>
<tr>
<td>Data Matrix - 5 mil</td>
<td>6 - 10 cm / 2.3 - 3.9 in</td>
<td>5 - 9.5 cm / 1.9 - 3.7 in</td>
<td>3.5 - 13 cm / 1.3 - 5.1 in</td>
</tr>
<tr>
<td>Data Matrix - 7.5 mil</td>
<td>8 - 16 cm / 3.1 - 6.5 in</td>
<td>7.5 - 15 cm / 2.9 - 5.9 in</td>
<td>5.5 - 18 cm / 2.1 - 7.4 in</td>
</tr>
<tr>
<td>Data Matrix - 10 mil</td>
<td>9 - 19 cm / 3.5 - 7.5 in</td>
<td>8 - 15 cm / 3.1 - 5.9 in</td>
<td>6 - 17 cm / 2.7 - 6.7 in</td>
</tr>
<tr>
<td>QR - 7.5 mil</td>
<td>8 - 16 cm / 3.1 - 6.5 in</td>
<td>7.5 - 15 cm / 2.9 - 5.9 in</td>
<td>5.5 - 18 cm / 2.1 - 7.4 in</td>
</tr>
<tr>
<td>QR - 10 mil</td>
<td>9 - 19 cm / 3.5 - 7.5 in</td>
<td>8 - 15 cm / 3.1 - 5.9 in</td>
<td>6 - 17 cm / 2.7 - 6.7 in</td>
</tr>
</tbody>
</table>

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 (AIMING SYSTEM) Complies with EU RoHS
HAZARDOUS SUBSTANCES (RoHS)

Downloadable images:
- PowerScan® 8500 Direct Download
- HLS-8000 Universal Holster
- STD-8000 Hands-Free Stand
- HLD-8000 Desk/Wall Holder
- PC-8000 Protective Case/Belt Holster
- HLS-8000 Universal Holster

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PC Tools: Datadogic Aladdin™

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R40-0322-UK A 0108