

# POWERSCAN™ PD9630

Everlasting handheld industrial scanners for 1D/2D barcode reading  
with top flexibility



## ULTRA-RUGGED WITH NEW BALANCED ERGONOMICS!

The PowerScan family of bar code readers are the ultimate industrial handheld scanners designed and constructed to withstand the toughest environmental conditions. The PowerScan PD9630 imagers have an ultra-rugged design, an ergonomic shape with well-balanced weight to reduce operator stress during daily activities and an intuitive aiming system, allowing the highest first-pass reading rate while reducing unnatural wrist movement.

## THREE OPTIC OPTIONS TO FULFILL ANY CUSTOMER NEED

The PowerScan PD9630 area imagers are available in three different optics, to satisfy any customer need. The **Standard Range** optic is ideal for most of the applications requiring barcode reading at intuitive distance; the **High Performance** optic adds the capability to decode high density barcodes together with an increased depth of field on standard 1D/2D codes; the **Document Capture** model is thought for Wide Angle code reading and Document Capture applications.

## THE BEST FEEDBACK TO THE OPERATOR

The PD9630 area imagers also feature Datalogic's exclusive 3 Green Lights (3GL™) for superior good-read feedback together with a loud beeper and vibration. The 'Green Spot' technology directly on the code and dual Good Read LEDs increase visibility at any angle. All models have multi-interface capabilities featuring the most popular interfaces: RS-232, USB and offer an optional Ethernet for standard or industrial uses.

Datalogic's Motionix™ motion-sensing technology detects the natural actions of the operator to automatically switch the scanner into the desired scanning mode (handheld or presentation scanning).

## FEATURES

- Snappy omnidirectional reading from contact to over 2.0 m / 6.5 ft
- Datalogic's new instinctive 'frame' aimer
- Water and Particulate Sealing Rating: IP65 and IP67
- 10 million trigger hits
- White light illumination
- Datalogic's 3GL™ (3 Green Lights) technology and loud beeper for good-read feedback
- Datalogic's Motionix™ motion-sensing technology
- Ergonomic shape provides hours of tireless data collection for the user
- Supports 1D, stacked and 2D codes, postal codes and image capture
- EASEOFCARE Service Plans offer a wide range of service options to protect your investment, ensuring maximum productivity and ROI.

## INDUSTRY - APPLICATION

- **Manufacturing Shop Floor:**
  - Work-in-Progress
  - Sub-Assembly
  - Component Tracking
  - Quality Control
  - Time and Cost Analysis
  - Machine Replenishment /Configuration
  - Line Inventory Control
- **Warehouse and Logistic Centers:**
  - Shipping / Receiving
  - Parcel Preparation
  - Picking / Put Away
  - Automatic Sorting Back-Up
  - End of Line Sorting



POWERSCAN PD9630

TECHNICAL SPECIFICATIONS

| DECODING CAPABILITY  |                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 1D / Linear Codes    | Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.                                                            |
| 2D Codes             | Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Codee; Dot code                                                 |
| Postal Codes         | Australian Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Portuguese Post; Postnet; Royal Mail Code (RM4SCC); Swedish Post |
| Digital Watermarking | Digimarc Barcodes (PD9630-HP and PD9630-DC)                                                                                              |

| ELECTRICAL    |                                                                                                                                                                 |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current       | Operating (Typical):<br>PD9630-SR: 200mA @ 5V; 120mA @ 12V<br>PD9630-HP/ PD9630-DC: 280mA @ 5V / 140mA @ 12V<br>Standby/Idle (Typical): 187mA @ 5V / 92mA @ 12V |
| Input Voltage | 5 - 30 VDC ± 5%                                                                                                                                                 |

| ENVIRONMENTAL                  |                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Ambient Light                  | 0 - 100,000 lux                                                                                                      |
| Drop Resistance                | Withstands 50 drops from 2.5 m / 8.2 ft @ 20 °C / 68 °F;<br>Withstands 50 drops from 2.0 m / 6.6 ft @ -20 °C / -4 °F |
| Tumble                         | 5,000 @ 1 m / 3.3 ft                                                                                                 |
| Trigger Resistance             | Withstands 10 million hits                                                                                           |
| ESD Protection (Air Discharge) | 20 kV                                                                                                                |
| Humidity (Non-Condensing)      | 0 - 95%                                                                                                              |
| Particulate and Water Sealing  | IP67 and IP65                                                                                                        |
| Temperature                    | Operating: -20 to 50 °C / -4 to 122 °F<br>Storage/Transport: -40 to 70 °C / -40 to 158 °F                            |

| INTERFACES |              |
|------------|--------------|
| Interfaces | RS-232 / USB |

| PHYSICAL CHARACTERISTICS |                                           |
|--------------------------|-------------------------------------------|
| Colors Available         | Yellow/Black                              |
| Dimensions H x L x W     | 19.0 x 14.0 x 7.9 cm / 7.5 x 5.5 x 3.1 in |
| Weight                   | 318.0 g / 11.2 oz                         |

| READING PERFORMANCE            |                                                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imager Sensor                  | PD9630-SR/HP: 1280 x 800<br>PD9630-DC: 1280 x 800 color sensor                                                                                                                    |
| Light Source                   | Aiming: 630 - 680 nm VLD<br>Illumination: White LED reading light                                                                                                                 |
| Print Contrast Ratio (Minimum) | 15%                                                                                                                                                                               |
| Reading Angle                  | Pitch: +/- 52°; Roll (Tilt): 360°; Skew (Yaw): +/- 52°                                                                                                                            |
| Field Of View                  | SR and HP: 38° H, 24° V<br>DC: 50° H, 33° V                                                                                                                                       |
| Reading Indicators             | Beeper (Adjustable Tone and Volume); Datalogic's 3GL™ (Three Green Lights) technology for good-read feedback; Datalogic 'Green Spot' on the Code; Dual Good Read LEDs; Vibration. |
| Resolution (Maximum)           | PD9630-SR/PD9630-DC: 1D Codes: 3 mil; 2D Codes: 6 mil<br>PD9630-HP: 1D Codes: 2.5 mil; 2D Codes: 4 mil                                                                            |

| DECODING CAPABILITY                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical Depth of Field                                                                                                                                                                                                                                      | Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.                                                                                                                                                                                                                                                                                      |
| PD9630-SR<br>Code 128<br>5 mils: 6.4 to 30.9 cm / 2.5 to 12.2 in<br>20 mils: 4 to 103.7 cm / 1.6 to 40.8 in<br>40 mils: 5.5 to 175 cm / 2.2 to 68.9 in<br>EAN/UPC 13 mils: 4 to 67.5 cm / 1.5 to 26.5 in<br>DataMatrix 10 mils: 6 to 30 cm / 2.5 to 11.8 in | PD9630-HP<br>Code 128<br>2.5 mils: 6.3 to 11.5 cm / 2.5 to 4.5 in<br>5 mils: 3.8 to 41 cm / 1.5 to 16.1 in<br>20 mils: 4 to 157 cm / 1.6 to 61.8 in<br>40 mils: 5.5 to 242.9 cm / 2.1 to 95.6 in<br>EAN/UPC 13 mils: 4 to 120 cm / 1.5 to 40.2 in<br>PDF417 10 mils: 0.5 to 46.1 cm / 0.2 to 18.1 in<br>DataMatrix 4 mils: 6.5 to 9.3 cm / 2.5 to 3.6 in<br>DataMatrix 10 mils: 4.2 to 32 cm / 1.6 to 12.6 in |

| SAFETY & REGULATORY      |                                                                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agency Approvals         | The product meets necessary safety and regulatory approvals for its intended use.<br>The Regulatory Addendum for this product can be referred to for a complete list of certifications. |
| Environmental Compliance | Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H.                                                                                                                     |
| Laser Classification     | Caution Laser Radiation - Do not stare into beam CDRH Class II; IEC 60825 Class 2                                                                                                       |
| LED Classification       | IEC 62471 LED Class: Exempt                                                                                                                                                             |

| UTILITIES            |                                                                                 |
|----------------------|---------------------------------------------------------------------------------|
| Datalogic Aladdin™   | Datalogic Aladdin configuration program is available for download at no charge. |
| OPOS / JavaPOS       | OPOS and JavaPOS Utilities are available for download at no charge.             |
| Remote Host Download | Available on request                                                            |

| WARRANTY |                         |
|----------|-------------------------|
| Warranty | 3-Year Factory Warranty |

ACCESSORIES

Cases / Holsters



HLS-P080 Universal Holster  
(HLS-8000)

Mounts / Stands



STD-P096 Stand, Hands-free  
(STD-9600)



HLD-P096 Desk/Wall Holder  
(HLD-9600)



7-0404 Industrial Take-Up Reel

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# POWERSCAN™ PM9600

Everlasting handheld industrial scanners for 1D/2D barcode reading  
with top flexibility



## ULTRA-RUGGED WITH NEW BALANCED ERGONOMICS!

The PowerScan family of bar code readers are the ultimate industrial handheld scanners designed and constructed to withstand the toughest environmental conditions. The PowerScan 9600 imagers have an ultra-rugged design, an ergonomic shape with well-balanced weight to reduce operator stress during daily activities and an intuitive aiming system, allowing the highest first-pass reading rate while reducing unnatural wrist movement.

## MOBILITY ENHANCES PRODUCTIVITY

The PowerScan 9600 cordless model further enhances the operator efficiency and safety with Datalogic's STAR Cordless System™. Accurate power management allows long lasting battery life to always guarantee more than one shift of intensive scanning. The PowerScan 9600 scanner features Datalogic's Wireless Charging System. Based on inductive-charging technology, Datalogic's Wireless Charging System eliminates battery contacts and pins that often get dirty, bent, or broken over time – and this removes a key point of failure for devices used in industrial and retail functions.

## MODULARITY WITH THE BEST FLEXIBILITY

The BC9600 base/charger has a modular design and is available with multiple interface plug-ins for standard and industrial communication, such as RS-232, USB, Standard Ethernet and Industrial Ethernet protocols.

## FEATURES

- Snappy omnidirectional reading on 1D, stacked and 2D codes, postal codes
- Standard Range and High Performance models
- Water and Particulate Sealing Rating: IP65 and IP67; Cradle IP65; 10 million hits trigger
- Center of gravity design
- Modular cradle design allowing interface expansion
- White light illumination
- High visibility OLED Display with 4-Keys /16-Keys keypad options
- Datalogic's 3GL™ (3 Green Lights) technology and loud beeper for good-read feedback
- Datalogic's Motionix™ motion-sensing technology
- Wireless Charging reducing total cost of ownership
- EASEOFCARE Service Plans offer a wide range of service options to protect your investment, ensuring maximum productivity and ROI.

## INDUSTRY - APPLICATION

- **Manufacturing Shop Floor:**
  - Work-in-Progress
  - Sub-Assembly
  - Component Tracking
  - Quality Control
  - Time and Cost Analysis
  - Machine Replenishment /Configuration
  - Line Inventory Control
- **Warehouse and Logistic Centers:**
  - Shipping / Receiving
  - Parcel Preparation
  - Picking / Put Away
  - Automatic Sorting Back-Up
  - End of Line Sorting



POWERSCAN PM9600

TECHNICAL SPECIFICATIONS

| CORDLESS COMMUNICATIONS         |                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Datalogic STAR Cordless System™ | Radio Frequency: 433 MHz; 910 MHz;<br>Effective Radiated Power: 433 MHz: < 10 mW;<br>910 MHz: < 50 mW; Point-to-Point/Multi-Point Configuration; Max. Readers per Radio Receiver: 16; Two Way Communications.<br>Radio Range (Open Air): 433 MHz: 150 m / 492 ft low speed; 100 m / 328 ft high speed<br>910 MHz: 230 m / 754 ft low speed;<br>Frequency hopping; 180 m / 590 ft high speed |

| DECODING CAPABILITY  |                                                                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1D / Linear Codes    | Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.                                                                                                         |
| 2D Codes             | Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code; Dot code                                                                                               |
| Postal Codes         | Australian Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Portuguese Post; Postnet; Royal Mail Code (RM4SCC); Swedish Post                                              |
| Stacked Codes        | EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites |
| Digital Watermarking | Digimarc Barcodes (HP and DC models)                                                                                                                                                  |

| ELECTRICAL    |                                                                                                                                                                   |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery       | Battery Type: Lithium-Ion: 3350 mAh<br>Charge time @ 12 VDC: 2.5 hours to charge up to 95%, 3.2 hours to charge 100%, External Power.<br>Reads per charge: 80,000 |
| Current       | Charging (Typical) < 15 W<br>Scanner only: 480 mA @ 3.7 V (Operative)<br>Cradle only: 150 mA @ 5 V (Operative)                                                    |
| Input Voltage | Host powered: 5V DC ± 5% or 10 - 30 VDC<br>External power supply: 10 - 30 VDC ± 5%                                                                                |

| ENVIRONMENTAL                  |                                                                                                                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Light                  | 0 - 100,000 lux                                                                                                                                                             |
| Drop Resistance                | Withstands 50 drops from 2.5 m / 8.2 ft @ 20 °C / 68 °F;<br>Withstands 50 drops from 2.0 m / 6.6 ft @ -20 °C / -4 °F                                                        |
| Trigger Resistance             | Withstands 10 million hits                                                                                                                                                  |
| ESD Protection (Air Discharge) | 20 kV                                                                                                                                                                       |
| Humidity (Non-Condensing)      | 0 - 95%                                                                                                                                                                     |
| Particulate and Water Sealing  | IP67 and IP65; Cradle IP65 (specific models)                                                                                                                                |
| Temperature                    | Operating: -20 to 50 °C / -4 to 122 °F<br>Storage/Transport: -40 to 70 °C / -40 to 158 °F<br>Charging: 0 to 40 °C / 32 to 104 °F nominal;<br>0 to 35 °C / 32 to 95 °F ideal |

| INTERFACES |                                                                                   |
|------------|-----------------------------------------------------------------------------------|
| Interfaces | RS-232 / USB / Keyboard Wedge Multi-Interface / Ethernet and Industrial Protocols |

| PHYSICAL CHARACTERISTICS |                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------|
| Colors Available         | Yellow/Black                                                                              |
| Dimensions H x L x W     | 19.8 x 14.0 x 7.9 cm / 7.8 x 5.5 x 3.1 in                                                 |
| Display                  | PM9600-D/DK. 1.8" OLED graphic display;<br>Font Dimensions: User selectable.              |
| Keypad                   | PM9600-D: 4 Keys, PM9600-DK: 16 Keys; Configurable                                        |
| Weight                   | PM9600-XX: 425 g / 15.0 oz<br>PM9600-DXX: 445 g / 15.7 oz<br>PM9600-DKXX: 455 g / 16.0 oz |

| READING PERFORMANCE            |                                                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imager Sensor                  | 1280 x 800 pixels                                                                                                                                                                 |
| Light Source                   | Aiming: 630 - 680 nm VLD<br>Illumination: White LED reading light                                                                                                                 |
| Print Contrast Ratio (Minimum) | 15%                                                                                                                                                                               |
| Reading Angle                  | Pitch: +/- 52°; Roll (Tilt): 360°; Skew (Yaw): +/- 52°                                                                                                                            |
| Field Of View                  | SR and HP: 38° H, 24° V                                                                                                                                                           |
| Reading Indicators             | Beeper (Adjustable Tone and Volume); Datalogic's 3GL™ (Three Green Lights) technology for good-read feedback; Datalogic 'Green Spot' on the Code; Dual Good Read LEDs; Vibration. |
| Resolution (Maximum)           | SR: 1D Codes: 3 mil; 2D Codes: 6 mil<br>HP: 1D Codes: 2.5 mil; 2D Codes: 4 mil                                                                                                    |

| READING RANGES                                  |                                                                                                                          |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Typical Depth of Field                          | Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent. |
| SR Models                                       | HP Models                                                                                                                |
| Code 128                                        | Code 128                                                                                                                 |
| 5 mils: 6.4 to 30.9 cm / 2.5 to 12.2 in         | 2.5 mils: 6.3 to 11.5 cm / 2.5 to 4.5 in                                                                                 |
| 20 mils: 4 to 103.7 cm / 1.6 to 40.8 in         | 5 mils: 3.8 to 41 cm / 1.5 to 16.1 in                                                                                    |
| 40 mils: 5.5 to 175 cm / 2.2 to 68.9 in         | 40 mils: 5.5 to 242.9 cm / 2.1 to 95.6 in                                                                                |
| EAN/UPC 13 mils: 4 to 67.5 cm / 1.5 to 26.5 in  | EAN/UPC 13 mils: 4 to 120 cm / 1.5 to 40.2 in                                                                            |
| DataMatrix 10 mils: 6 to 30 cm / 2.5 to 11.8 in | PDF417 10 mils: 0.5 to 46.1 cm / 0.2 to 18.1 in                                                                          |
|                                                 | DataMatrix 10 mils: 4.2 to 32 cm / 1.6 to 12.6 in                                                                        |

| SAFETY & REGULATORY      |                                                                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agency Approvals         | The product meets necessary safety and regulatory approvals for its intended use.<br>The Regulatory Addendum for this product can be referred to for a complete list of certifications. |
| Environmental Compliance | Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H.                                                                                                                     |
| Laser Classification     | Caution Laser Radiation - Do not stare into beam CDRH Class II; IEC 60825 Class 2                                                                                                       |
| LED Classification       | IEC 62471 LED Class: Exempt                                                                                                                                                             |

| UTILITIES          |                                                                                 |
|--------------------|---------------------------------------------------------------------------------|
| Datalogic Aladdin™ | Datalogic Aladdin configuration program is available for download at no charge. |
| OPOS / JavaPOS     | OPOS and JavaPOS Utilities are available for download at no charge.             |

| WARRANTY |                         |
|----------|-------------------------|
| Warranty | 3-Year Factory Warranty |

ACCESSORIES

Base Stations / Chargers



BC9630 Base station/charger Multi-Interface

BC9631 Base station/charger Multi-Interface, IP65

Battery



RBP-PM96 Removable battery

Multi-Battery Charger



MC-P096-M2 Multi Battery Charger 2 slots

MC-P096-M4 Multi Battery Charger 4 slots

MC-P096-E2 Extension modules 2 slots

Holder



HLD-P096 Desk/Wall Holder (HLD-9600)

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