

# POWERSCAN™ PM9501



## AIM, TRIGGER, DECODE: IT'S THAT SIMPLE!

An intuitive and effortless scanning experience is the target of the PowerScan™ 9501 series. They combine omnidirectional reading capabilities with outstanding optical characteristics. The result is a scanner that is able to read any kind of bar code, regardless of the orientation, from contact to over 1.0 m / 3.3 ft, depending on the bar code resolution. In addition, Datalogic's latest decoding software guarantees snappy reading in any type of environment.

## MOBILITY ENHANCES PRODUCTIVITY

The Datalogic STAR Cordless System™ for narrow-band radio communications was developed specifically to maximize efficiency and reliability for handheld scanner data collection applications. The PowerScan PM9501 models are equipped with a new generation of the STAR-System that further improves the already outstanding features of versatility, ease of use and radio range.

The PM9501 series offers two display options: 4 configurable keys and a full 16-key keyboard. This increases interaction between the host and the user allowing a two-way exchange of information for more reliable and effective communications.

The BC9180 base/charger also includes in one model two different Ethernet connections: Standard Ethernet and Industrial Ethernet protocols such as Ethernet IP and Modbus.

## DEVELOPED WITH THE USER IN MIND

Handle shape, well-balanced weight and an intuitive aiming system allows high first-pass reading rates while reducing unnatural wrist movements for improved ergonomics and user comfort.

The PowerScan 9501 area imagers use a soft-pulsed white illumination light that is very gentle on the eyes and less troublesome to the operator during scan-intensive applications.

## FEATURES

- High-performance Liquid Lens allows one model to read standard, wide and high density codes
- Snappy omnidirectional reading
- Intuitive aiming system
- Soft white light illumination
- Available with optional display and 4 or 16-key keyboards
- High speed 433 MHz and 910 MHz radio communications
- Point-to-point and multi-point transmission
- Networking and seamless roaming
- Multiple interfaces available
- Ethernet Connectivity (Standard and Industrial)
- Lithium-Ion battery replaces in 3 seconds!
- Datalogic's Motionix™ motion-sensing technology
- Ergonomic shape
- Datalogic's 3GL™ (3 Green Lights) technology and loud beeper for good-read feedback
- Water and Particulate Sealing Rating: IP65
- In-field replaceable window and cradle contacts
- EASEOFCARE Service Plans offer a wide range of service options to protect your investment, ensuring maximum productivity and ROI

## INDUSTRY - APPLICATION

- Entertainment:
  - Access Control
  - Mobile Coupons
  - Ticket Validation
  - Security / Age Verification
  - Lottery
- 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™ PM9501

TECHNICAL SPECIFICATIONS

CORDLESS COMMUNICATIONS

|                                 |                                                                                                                                                                                                 |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Datalogic STAR Cordless System™ | Effective Radiated Power:<br>433 MHz: <10 mW; 910 MHz: <50 mW<br>Point-to-Point Configuration<br>Multi-Point Configuration:<br>Max. Readers per Radio Receiver: 16                              |
| Radio Frequency                 | 433 MHz; 910 MHz                                                                                                                                                                                |
| Radio Range (Open Air)          | 433 MHz: 120 m / 393 ft low speed;<br>50 m / 164 ft high speed<br>910 MHz: 220 m / 721 ft low speed; Frequency hopping<br>170 m / 558 ft high speed<br>Seamless Roaming; Two Way Communications |

DECODING CAPABILITY

|                   |                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1D / Linear Codes | Autodiscriminates 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;                                                                                                        |
| 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 |

ELECTRICAL

|                                              |                                                                                                                                                 |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery                                      | Lithium-Ion 3350 mAh<br>Charge Time: External Power: 4.5 Hours;<br>Host Power: 10 Hours                                                         |
| Reads Per Charge                             | Continuous Reading: 60,000+ (typical @ 25 °C)                                                                                                   |
| Cradle Indicator LEDs                        | Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow)                                                                           |
| Cradle Consumption and DC Input Supply Range | Volt 10-30 VDC; Power <8W*;<br>Max 500mA when in host/bus powered mode*<br>*Typical input current measured under factory default configuration. |
| Operating (Typical)                          | 150 mA @ 10 VDC                                                                                                                                 |
| Input Voltage                                | External Power: 10-30 VDC; POT: 5 VDC +/- 10%                                                                                                   |

ENVIRONMENTAL

|                                |                                                                                                                                                    |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient Light                  | 0 - 100,000 lux                                                                                                                                    |
| Drop Resistance                | Cradle: Withstands 50 drops from 1.2 m / 3.9 ft onto a concrete surface<br>PM9501: Withstands 50 drops from 2.0 m / 6.6 ft onto a concrete surface |
| ESD Protection (Air Discharge) | 20 kV                                                                                                                                              |
| Humidity (Non-Condensing)      | 95%                                                                                                                                                |
| Particulate and Water Sealing  | IP65                                                                                                                                               |
| Temperature                    | Operating: -20 to 50 °C / -4 to 122 °F<br>Battery Charging: 0 to 45 °C / 32 to 113 °F<br>Storage/Transport: -40 to 70 °C / -40 to 158 °F           |

INTERFACES

|            |                                                                                                                         |
|------------|-------------------------------------------------------------------------------------------------------------------------|
| Interfaces | Keyboard Wedge; RS-232; RS-485;<br>USB: OEM USB; USB COM; USB HID Keyboard;<br>Optional Ethernet (Standard, Industrial) |
|------------|-------------------------------------------------------------------------------------------------------------------------|

PHYSICAL CHARACTERISTICS

|                  |                                                                                                                                                                      |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Colors Available | Yellow/Black                                                                                                                                                         |
| Dimensions       | Cradle: 24.0 x 10.8 x 9.5 cm / 9.4 x 4.3 x 3.8 in<br>PM9501: 21.2 x 11.0 x 7.4 cm / 8.3 x 4.3 x 2.9 in                                                               |
| Display          | PM9501-D, PM9501-DK: Display Type: Graphic with White Backlight; Font Dimensions: User selectable (6 lines x 21 columns default); Screen Dimensions: 48 x 132 pixels |
| Keypad           | PM9501-D: 4 Configurable Keys<br>PM9501-DK: 16 Configurable Keys                                                                                                     |
| Weight           | PM9501-XX, PM9501-HPXX, 400 g / 14.1 oz<br>PM9501-DXX, PM9501-DHPXX: 440 g / 15.5 oz<br>PM9501-DKXX, PM9501-DKHPXX: 445 g / 15.7 oz                                  |

READING PERFORMANCE

|                                |                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imager Sensor                  | PM9501: 864 x 544; PM9501-HP: 1280 x 1024                                                                                                                                               |
| Light Source                   | Aiming: 630 - 680 nm VLD; Illumination: White LEDs                                                                                                                                      |
| Print Contrast Ratio (Minimum) | 15%                                                                                                                                                                                     |
| Reading Angle                  | Pitch: +/- 40°; Roll (Tilt): 360°; Skew (Yaw): +/- 40°                                                                                                                                  |
| Reading Indicators             | Beeper (Adjustable Tone and Volume);<br>Datalogic's 3GL™ (Three Green Lights) technology and loud beeperfor good-read feedback: Datalogic 'Green Spot' on the Code, Dual Good Read LEDs |
| Resolution (Maximum)           | PM9501: 1D Codes: 4 mil; 2D Codes: 7.5 mil<br>PM9501-HP: 1D Codes: 2.5 mil; 2D Codes: 4 mil                                                                                             |

READING RANGES

|                               |                                 |                                                                                                                          |                                  |
|-------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>Typical Depth of Field</b> |                                 | Minimum distance determined by symbol length and scan angle; Printing resolution, contrast, and ambient light dependent. |                                  |
| <b>PM9501</b>                 |                                 | <b>PM9501-HP</b>                                                                                                         |                                  |
| 4 mils                        | 6.0 to 17.0 cm / 2.3 to 6.7 in  | 2.5 mils                                                                                                                 | 2.0 to 6.0 cm / 0.8 to 2.3 in    |
| 7.5 mils Data Matrix          | 9.0 to 12.0 cm / 3.5 to 4.7 in  | 4 mils Data Matrix                                                                                                       | 2.0 to 6.0 cm / 0.8 to 2.3 in    |
| 10 mils Data Matrix           | 4.0 to 18.0 cm / 1.5 to 7.0 in  | 10 mils Data Matrix                                                                                                      | 2.0 to 20.0 cm / 0.8 to 7.8 in   |
| 10 mils PDF417                | 2.0 to 25.0 cm / 0.8 to 9.8 in  | 10 mils PDF417                                                                                                           | 2.0 to 30.0 cm / 0.8 to 11.8 in  |
| 13 mils                       | 4.0 to 45.0 cm / 1.5 to 17.7 in | 13 mils                                                                                                                  | 3.0 to 60.0 cm / 1.1 to 23.6 in  |
| 20 mils                       | 4.0 to 55.0 cm / 1.5 to 21.6 in | 20 mils                                                                                                                  | 3.0 to 70.0 cm / 1.1 to 27.5 in  |
| 40 mils                       | 4.0 to 85.0 cm / 1.5 to 33.4 in | 40 mils                                                                                                                  | 3.0 to 110.0 cm / 1.1 to 43.3 in |

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. |
| 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<br>CDRH Class II: IEC 60825 Class 2                                                                                                   |
| LED Classification       | IEC 62471 Class 1 LED                                                                                                                                                                  |

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

Base Stations/Chargers



BC9030-433 / BC9030-910  
Base/Charger, Multi-Interface



BC9130-433 / BC9130-910 Base/Dual  
Charger, Multi-Interface  
BC9160-433 / BC9160-910 Base/Dual  
Charger, Multi-Interface/RS-485  
BC9180-433 / BC9180-910 Base/Dual  
Charger/Ethernet (Standard, Industrial)

Cases/Holsters



HLS-P080 Universal Holster  
(HLS-8000)

Mounts/Stands



HLD-P080 Desk/Wall Holder  
(HLD-8000)



7-0404 Industrial Take-Up Reel

Miscellaneous



SD9030 STAR System  
USB Industrial Dongle  
(433 or 910 MHz available)