

# 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

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

### DECODING CAPABILITY

<b>1D / Linear Codes</b>	Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes.
<b>2D Codes</b>	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code;
<b>Postal Codes</b>	Australian Post; China Post; IMB; Japanese Post; KIX Post; Planet Code; Portuguese Post; Postnet; Royal Mail Code (RM4SCC); Swedish Post;
<b>Stacked Codes</b>	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

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

### ENVIRONMENTAL

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

### INTERFACES

<b>Interfaces</b>	Keyboard Wedge; RS-232; RS-485; USB: OEM USB; USB COM; USB HID Keyboard; Optional Ethernet (Standard, Industrial)
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### PHYSICAL CHARACTERISTICS

<b>Colors Available</b>	Yellow/Black
<b>Dimensions</b>	Cradle: 24.0 x 10.8 x 9.5 cm / 9.4 x 4.3 x 3.8 in PM9501: 21.2 x 11.0 x 7.4 cm / 8.3 x 4.3 x 2.9 in
<b>Display</b>	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
<b>Keypad</b>	PM9501-D: 4 Configurable Keys PM9501-DK: 16 Configurable Keys
<b>Weight</b>	PM9501-XX, PM9501-HPXX, 400 g / 14.1 oz PM9501-DXX, PM9501-DHPXX: 440 g / 15.5 oz PM9501-DKXX, PM9501-DKHPXX: 445 g / 15.7 oz

### READING PERFORMANCE

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

<b>Agency Approvals</b>	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.
<b>Environmental Compliance</b>	Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H.
<b>Laser Classification</b>	Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2
<b>LED Classification</b>	IEC 62471 Class 1 LED

### UTILITIES

<b>Datalogic Aladdin™</b>	Datalogic Aladdin configuration program is available for download at no charge.
<b>OPoS / JavaPOs</b>	OPoS and JavaPOs Utilities are available for download at no charge
<b>Remote Host Download</b>	Available on request

### WARRANTY

<b>Warranty</b>	3-Year Factory Warranty
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## 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)