# POWERSCAN™ PM9501-AR

## TECHNOLOGY DRIVEN

The PowerScan™ PM9000 series includes different models able to satisfy all customers' needs; the PM9501-AR is the 1D/2D Auto Range model with extra-long range capabilities. The PM9501-DAR is the intermediate model and includes a display and 4-key keypad. The ultimate PM9501-DKAR model features a display with a full 16-key keyboard. The PM9501-DKAR model significantly increases the sophistication of interaction with the host system and opens up new potential uses of the scanner, making it suitable for applications that would normally require a more expensive portable data terminal. The BC9180 base includes one model with two different Ethernet connections: Standard Ethernet and Industrial Ethernet protocols such as Ethernet IP and Modbus.

## DATALOGIC'S STAR CORDLESS SYSTEM™

Narrow band radio communications with Datalogic's STAR Cordless System™ 2.0 provides the key to increased productivity and flexibility in the workplace. It offers scalable solutions from simple point-to-point applications to networking capabilities combined with seamless roaming for complex installations.

## GOOD-READ FEEDBACK AND SUPERIOR READING PERFORMANCE

The PM9501-AR readers feature Datalogic's exclusive 3 Green Lights (3GL™) for superior good-read feedback. The patented 'Green Spot' directly on the code and dual Good Read LEDs on the top and back of the cap add increased visibility at any angle.

The PowerScan PM9501 Auto Range can read 1D/2D barcodes with an extended reading range. Its powerful autofocus system allows the scanner to read from a short distance of 15 cm / 6 in to a distance of more than 20 m / 65 ft because of a fast focus adjustment, allowing the operator to easily read a close up barcode and then focus at the top of a warehouse rack.

## FEATURES

- Optics: Auto Range: > 20 m / 65 ft
- Fast Autofocus system, reads up to 3 mils
- Available in 3 models:
    - Basic
    - With Display and 4-Key Keypad
    - With Display and Full Alphanumeric Keypad
- Radio frequencies available in 433 or 910 MHz
- Point-to-point and multi-point transmission
- Seamless roaming
- Ethernet Connectivity (Standard and Industrial)
- Datalogic 3GL™ and loud beeper for good-read feedback
- User replaceable Lithium-Ion battery
- Operates over a wide range of temperatures
- Water and Particulate Sealing Rating: IP65
- Drop resistance to 2.0 m / 6.5 ft
- EASEOFCARE Service Plans offer a wide range of service options to protect your investment, ensuring maximum productivity and ROI

## INDUSTRY – APPLICATION

- **Factory Automation**:
    - Material Picking
    - Shipping / Receiving
    - Order Processing
- **Manufacturing Shop Floor**:
    - Work-in-Progress
    - Component Tracking
- **Warehouse / Logistic Centers**:
    - Forklift Picking Applications
    - Shipping / Receiving
    - Parcel Preparation

**In-Position Technologies**

## POWERSCAN PM9501-AR
# TECHNICAL SPECIFICATIONS

### WIRELESS COMMUNICATIONS

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|---|---|
| **Datalogic STAR Cordless System** | 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: 50 m / 164 ft at 500 KB/s;<br>120 m / 394 ft at 19.2 KB/s<br>910 MHz: 140 m / 459 ft at 500 KB/s;<br>240 m / 787 ft at 36.8 KB/s, frequency hopping<br>50 m / 164 ft at 36.8 KB/s, fixed channel;<br>Seamless Roaming; Two Way Communications |

### DECODING CAPABILITY

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| **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 |
| **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

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| **Battery** | Li-Ion 3350 mAh;<br>Charge Time: External Power: 4.5 Hours;<br>Host Power: 10 Hours |
| **Reads Per Charge** | 40,000+ (continuous reading) |
| **Cradle Indicator LEDs** | Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow) |
| **Cradle Consumption** | External Power < 8W;<br>POT: Max 500 mA when in host/bus powered mode. |
| **Input Voltage** | External: 10 - 30 VDC; POT: 5 VDC +/- 10% |

### ENVIRONMENTAL

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| **Ambient Light** | Immune to light exposure in offices/facilities and direct exposure to sunlight. |
| **Drop Resistance** | Withstands 50 drops from 2.0 m / 6.5 ft to concrete |
| **ESD Protection (Air Discharge)** | 20 kV |
| **Humidity (Non-Condensing)** | 0 - 95% |
| **Particulate and Water Sealing** | IP65 |
| **Temperature** | Operating: –20 to 50 °C / –4 to 122 °F<br>Storage/Transport: –40 to 70 °C / –40 to 158 °F |

### INTERFACES

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

### PHYSICAL CHARACTERISTICS

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| **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-AR: 21.2 x 11.0 x 7.4 cm / 8.3 x 4.3 x 2.9 in |
| **Display** | PM9501-DAR, PM9501-DKAR: 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-AR: 460.0 g / 16.2 oz<br>PM9501-DAR: 485 g / 17.1 oz<br>PM9501-DKAR: 485 g / 17.1 oz |

### READING PERFORMANCE

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| **Light Source** | LED |
| **Print Contrast Ratio (Minimum)** | 15% |
| **Reading Angle** | Pitch: +/- 80°; Roll (Tilt): +/- 180°; Skew (Yaw): +/- 60° |
| **Field of View** | Near Field: 14°(H) x 10.5°(V);<br>Over 3 m / 10 ft: 14.4°(H) x 10.8°(V) |
| **Reading Indicators** | Beeper; Datalogic Three Green Lights (3GL™) Good Read Feedback: Datalogic 'Green Spot' on the Code, Dual Good Read LEDs; Good Transmission |
| **Resolution (Maximum)** | 1D Codes: 3 mils; 2D Codes: 4 mils |

### READING RANGES

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| **Typical Depth of Field** | Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent. |

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| EAN 13: | | 20 to 290 cm / 7.8 to 114.1 in |
| Code 39: | 10 mils: | 15 to 160 cm / 5.9 to 63.0 in |
| | 40 mils: | 50 to 1,100 cm / 20.0 to 433.0 in |
| | 100 mils: | up to 2,300 cm / 75.0 ft |
| Code 128: | 15 mils: | 30 to 330 cm / 11.8 to 129.9 in |
| | 40 mils: | 60 to 850 cm / 23.6 to 335.0 in |
| | 100 mils: | up to 20 m / 65.0 ft |
| DataMatrix: | 10 mils: | 20 to 85 cm / 7.8 to 33.5 in |
| | 55 mils: | 30 to 550 cm / 11.8 to 216.5 in |
| | 100 mils: | 30 to 880 cm / 11.8 to 349.5 in |
| | 200 mils: | up to 20 m / 65 ft |

**Note:** Reading performances may change with different symbologies; Reading performances @ 300 lux of ambient light.

### SAFETY & REGULATORY

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| **Agency Approvals** | The product meets necessary safety and regulatory approvals for its intended use. |
| **Environmental Compliance** | Complies to EU RoHS; Complies to China RoHS |
| **Laser Classification** | Caution Laser Radiation - Do not stare into beam CDRH Class II; IEC 60825-1 Class 2 |
| **LED Classification** | IEC 62471 Exempt Risk Group |

### UTILITIES

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

### WARRANTY

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| **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)

## Batteries/Battery Chargers



RBP-PM91-BK  Removable Battery Pack
FBP-PM91  Fixed Battery Pack
MC-P090  Multiple Battery Charger, 4-Slots

## Cases/Holsters



HLS-P080  Universal Holster (HLS-8000)
PC-P090  Protective Case/Belt Holster (PC-9000)

## Mounts/Stands



7-0404 Industrial Take-Up Reel
HLD-P080 Desk/Wall Holder (HLD-8000)
STD-P090 Hands Free Stand (STD-9000)
VMK-P090 Vehicle Mount Kit

## Miscellaneous



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