# POWERSCAN™ PM9501

## **\$DATALOGIC**



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

An intuitive and effortless scanning experience is the target of the PowerScan<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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

CORDLESS COMMU	NICATIONS
Datalogic STAR Cordless System™	Effective Radiated Power: 433 MHz: <10 mW; 910 MHz: <50 mW Point-to-Point Configuration Multi-Point Configuration: Max. Readers per Radio Receiver: 16
Radio Frequency	433 MHz; 910 MHz
Radio Range (Open Air)	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 CAPABI	LITY
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 Charge Time: External Power: 4.5 Hours; 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*; Max 500mA when in host/bus powered mode* *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 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 Battery Charging: 0 to 45 °C / 32 to 113 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F
INTERFACES	
Interfaces	Keyboard Wedge; RS-232; RS-485; USB: OEM USB; USB COM; USB HID Keyboard; Optional Ethernet (Standard, Industrial)

PHYSICAL CI	HARAC	TERISTICS
Colors Available		Yellow/Black
Dimensions		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
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 PM9501-DK: 16 Configurable Keys
Weight		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 PE	RFORM	IANCE
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); Datalogic's 3GL™ (Three Green Lights) technology and loud beeperfor good-read feedback: Datalogic 'Green Spot' on the Code, Dual Good Read LEDs
Resolution (Maxim	um)	PM9501: 1D Codes: 4 mil; 2D Codes: 7.5 mil PM9501-HP: 1D Codes: 2.5 mil; 2D Codes: 4 mil
READING RA	NGES	
Typical Depth of Fi	eld	Minimum distance determined by symbol length and scan angle; Printing resolution, contrast, and ambient light dependent.
PM9501     4 mils   6.0 to 17.0 cm / 2.3 to 6.7 ir     7.5 mils Data Matrix   9.0 to 12.0 cm / 3.5 to 4.7 ir     10 mils Data Matrix   4.0 to 18.0 cm / 1.5 to 7.0 ir     10 mils PDF417   2.0 to 25.0 cm / 0.8 to 9.8 ir     13 mils   4.0 to 55.0 cm / 1.5 to 17.7     20 mils   4.0 to 55.0 cm / 1.5 to 21.6		m / 3.5 to 4.7 in 4 mils Data Matrix 2.0 to 6.0 cm / 0.8 to 2.3 in
13 mils 20 mils	4.0 to 45.0 c 4.0 to 55.0 c	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in
13 mils 20 mils 40 mils	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c	m / 1.5 to 17.7 in   13 mils   3.0 to 60.0 cm / 1.1 to 23.6 in     m / 1.5 to 21.6 in   20 mils   3.0 to 70.0 cm / 1.1 to 27.5 in     xm / 1.5 to 33.4 in   40 mils   3.0 to 110.0 cm / 1.1 to 43.3 in
13 mils 20 mils	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c	m / 1.5 to 17.7 in   13 mils   3.0 to 60.0 cm / 1.1 to 23.6 in     m / 1.5 to 21.6 in   20 mils   3.0 to 70.0 cm / 1.1 to 27.5 in     xm / 1.5 to 33.4 in   40 mils   3.0 to 110.0 cm / 1.1 to 43.3 in
13 mils 20 mils 40 mils SAFETY & RE	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in   m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in   m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 in   TORY   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
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 in TORY 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. Complies to China RoHS; Complies to EU RoHS;
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Com	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 i TORY 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. Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. Caution Laser Radiation - Do not stare into beam
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Com Laser Classificatio	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 i TORY 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. Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Con Laser Classification	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 i TORY 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. Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Con Laser Classification LED Classification UTILITIES	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m/1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in   m/1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in   m/1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 in   TORY   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.   Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H.   Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2   JEC 62471 Class 1 LED
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Con Laser Classification LED Classification UTILITIES Datalogic Aladdin <sup>T</sup>	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m/1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m/1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m/1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 in TORY 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. Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2 IEC 62471 Class 1 LED Datalogic Aladdin configuration program is available for download at no charge. OPOS and JavaPOS Utilities are available for
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Com Laser Classification LED Classification UTILITIES Datalogic Aladdin <sup>TT</sup> OPOS / JavaPOS	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m / 1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in m / 1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in m / 1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 ii TORY 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. Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H. Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2 IEC 62471 Class 1 LED Datalogic Aladdin configuration program is available for download at no charge. OPOS and JavaPOS Utilities are available for download at no charge
13 mils 20 mils 40 mils SAFETY & RE Agency Approvals Environmental Con Laser Classification UTILITIES Datalogic Aladdin <sup>T</sup> OPOS / JavaPOS Remote Host Down	4.0 to 45.0 c 4.0 to 55.0 c 4.0 to 85.0 c EGULAT	m/1.5 to 17.7 in 13 mils 3.0 to 60.0 cm / 1.1 to 23.6 in   m/1.5 to 21.6 in 20 mils 3.0 to 70.0 cm / 1.1 to 27.5 in   m/1.5 to 33.4 in 40 mils 3.0 to 110.0 cm / 1.1 to 43.3 i   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.   Complies to China RoHS; Complies to EU RoHS; Complies to R.E.A.C.H.   Caution Laser Radiation - Do not stare into beam CDRH Class II: IEC 60825 Class 2   IEC 62471 Class 1 LED   Datalogic Aladdin configuration program is available for download at no charge.   OPOS and JavaPOS Utilities are available for download at no charge

## 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)







#### Miscellaneous



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

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