POWERSCAN™ 9500 SERIES

⊙DATALOGIC

2D area imagers with omnidirectional reading thrive in rugged and indestructible environments

RUGGED INDUSTRIAL AREA IMAGERS

The PowerScan 9500 product series is Datalogic's premium line of rugged industrial handheld area imagers including a corded model (PD9500) and 2 cordless models with either Bluetooth® wireless technology (PBT9500) or Datalogic's STAR Cordless System™ 2.0 (PM9500), a proprietary narrow band radio.

NEW TECHNOLOGY

The PowerScan 9500 imagers introduce a new technology with the 'Liquid Lens' feature which increases the depth of field and allows the reading of standard, wide and high density bar codes. 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). Additionally, the PowerScan 9500 family uses a soft-pulsed white illumination light resulting in reduced flashes, which is very gentle on the eyes and less troublesome to the operator during scan-intensive applications.

GOOD-READ FEEDBACK AND SUPERIOR READING PERFORMANCE

The PowerScan 9500 imagers feature Datalogic's exclusive 3 Green Lights (3GL™) for superior good-read feedback. The distinctive '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.

All models have multi-interface capabilities built in featuring the most popular interfaces: RS-232, RS-485, Keyboard Wedge and USB. The Datalogic Aladdin™ configuration program provides user-friendly features that simplify the start-up procedure, even for inexperienced users.

CORDLESS MODELS ARE SIMPLE TO USE AND DEPLOY

The PowerScan PBT9500 cordless model is based on Bluetooth 3.0 standard wireless technology, Class 1 Range (in open air); up to 100 m / 328 ft and is available in a Standard Range (SR) model.

The PowerScan PM9500 cordless model uses narrow band radio communications with Datalogic's STAR Cordless System™ 2.0 and provides increased productivity and flexibility in the workplace. The PM9501 model also 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.

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
- Bluetooth 3.0 compliant: Class 1; Piconet with up to 7 scanners connected to the same base station
- Multiple interfaces available
- Ethernet Connectivity (Standard and Industrial)
- Lithium-Ion battery replaces in 3 seconds!
- Datalogic's Motionix™ motion-sensing technology
- Ergonomic shape provides hours of tireless data collection for the user
- Image capture
- 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

INDUSTRIES – APPLICATIONS

- 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

TECHNICAL SPECIFICATIONS

WIRELESS COMMUNICATIONS

PBT9500	**Bluetooth Wireless Technology:** Piconet: Max. 7 readers per radio receiver (cradle and commercial dongle); Profiles: HID (Human Interface Device); SPP (Serial Port Profile); Protocol: Bluetooth 3.0 Certified Class 1 Radio Frequency: 2.40 to 2.48 GHz; Radio Range (Open Air): Class 1: Exceeds 100 m / 328 ft; Range distances are measured using the base station. Range with connection to other Bluetooth peripherals may show different results. Security: Data Encryption; Scanner Authentication
PM9500	**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 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; Charge Time: External Power: 4.5 Hours; Host Power: 10 Hours
Reads Per Charge	Continuous Reading: 60,000+ (typical @ 25 ºC)
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 (PM9500/PBT9500)	External Power: 10-30 VDC; POT: 5 VDC +/- 10%
Current (PD9500)	Operating (Typical): PD9531/PD9531-HP: 335 mA PD9531-HPE: 220 mA @ 10 VDC Standby/Idle (Typical): PD95301/PD9531-HP: 120 mA PD9531-HPE: 60 mA @ 10 VDC
Input Voltage (PD9500)	PD9531/PD9531-HP: 5 VDC +/- 10% PD9531-HPE: 10-30 VDC

ENVIRONMENTAL

Ambient Light	0 - 100,000 lux
Drop Resistance	Cradle: Withstands 50 drops from 1.2 m / 3.9 ft onto a concrete surface All models: Withstands 50 drops from 2.0 m / 6.6 ft onto a concrete surface
ESD Protection (Air Discharge)	20 kV
Humidity (Non-condensing)	0 to 95%
Particulate and Water Sealing	IP65
Temperature	Operating: –20 to 50 °C / -4 to 122 °F Battery Charging: 0 to 40 °C / 32 to 104 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

INTERFACES

Interfaces	Keyboard Wedge RS-232; USB: OEM USB; USB COM; USB HID Keyboard; Optional Ethernet (Standard, Industrial)

PHYSICAL CHARACTERISTICS

Colors Available	Yellow/Black
Dimensions	Cradle: 24 x 10.8 x 9.5 cm / 9.4 x 4.3 x 3.8 in Scanner: 21.2 x 11 x 7.4 cm / 8.3 x 4.3 x 2.9 in
Display (PM9500)	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
Keyboard (PM9500)	PM9501-D: 4 Configurable Keys PM9501-DK: 16 Configurable Keys
Weight	PBT9501 and PM9501 models: 400 g / 14.1 oz PM9501-DKXX, PM9501-DKHPXX: 445 g / 15.7 oz PD9501: 330.0 g / 11.6 oz

READING PERFORMANCE

Image Capture	Graphic Formats: BMP, JPEG, TIFF Greyscale: 256, 16, 2; JPEG, TIFF
Imager Sensor	9501: 864 x 544; 9501-HP: 1280 x 1024
Light Source	Aiming: 630 - 680 nm VLD; Illumination: White LEDs
Print Contrast Ratio (Min)	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 beeper for good-read feedback: Datalogic 'Green Spot' on the Code, Dual Good Read LEDs
Resolution (Maximum)	9501: 1D Codes: 4 mil; 2D Codes: 7.5 mil 9501-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.

9501	**9501-HP**
4 mils 6 to 17 cm / 2.3 to 6.7 in	2.5 mils 2 to 6 cm / 0.8 to 2.3 in
7.5 mils Data Matrix 9 to 12 cm / 3.5 to 4.7 in	4 mils Data Matrix 2 to 6 cm / 0.8 to 2.3 in
10 mils Data Matrix 4 to 18 cm / 1.5 to 7 in	10 mils Data Matrix 2 to 20 cm / 0.8 to 7.8 in
10 mils PDF417 2 to 25 cm / 0.8 to 9.8 in	10 mils PDF417 2 to 30 cm / 0.8 to 11.8 in
13 mils 4 to 45 cm / 1.5 to 17.7 in	13 mils 3 to 60 cm / 1.1 to 23.6 in
20 mils 4 to 55 cm / 1.5 to 21.6 in	20 mils 3 to 70 cm / 1.1 to 27.5 in
40 mils 4 to 85 cm / 1.5 to 33.4 in	40 mils 3 to 110 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 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)

Batteries/Battery Chargers

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

Cases/Holsters

HLS-P080 Universal Holster (HLS-8000)

Mounts/Stands

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

Miscellaneous

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