

# POWERSCAN™ 9100 SERIES

Innovative new laser-like technology with the benefits of a linear imager for outstanding 1D capabilities



## NEW TECHNOLOGY COMBINED WITH PRODUCT RELIABILITY

The PowerScan 9100 series of scanners has expanded with new technology that provides an innovative laser-like green scanning line that implements the definition of a laser and the benefits of a linear imager.

The 9100 series includes a corded version (PD9130), a cordless version featuring Bluetooth® wireless technology (PBT9100) and a cordless version featuring Datalogic's STAR Cordless System™ 2.0, a proprietary narrow band radio system (PM9100).

## BUILT TO LAST

The PowerScan 9100 series has been tested to withstand extreme environmental conditions and is suitable for the most rugged and demanding settings. A built-in tether hook for the cordless models can be suspended in the workplace, ensuring workplace productivity. A quick 3-second battery replacement combined with a single or multi-slot battery charger allows for continuous operation without interruption (cordless models).

## ONE PRODUCT FOR MULTIPLE APPLICATIONS

All models have multi-interface capabilities: RS-232, Keyboard Wedge, and USB. The 9100 series is fully supported by Datalogic's Aladdin™ configuration program which provides a user-friendly interface for the start-up procedure and device programming. The 9100 series also feature Datalogic's exclusive 3GL™ (3 Green Lights) for superior good-read feedback.

The PowerScan 9100 series all share the same features with outstanding reliability and reading performance on 1D codes.

The cordless PBT9100 and PM9100 scanners can also be mounted on a forklift with a Vehicle Mount Terminal (VMT) providing a complete solution for industrial warehouse applications.

## CONFIGURABLE TO FIT ALL APPLICATIONS

Based on Bluetooth 3.0 standard wireless technology, the PowerScan PBT9100 scanner can be configured to be Class 1 or Class 2 compliant. The scanner can be connected through the receiving base station to the host with a wide choice of interfaces or by connecting the scanner directly to any commercial or embedded Bluetooth compliant device.

The PowerScan PM9100 series includes different models to satisfy customers' needs; it is available in a basic cordless model and in two different models with a display and 4- or 16-key keypads.

## FEATURES

- Datalogic's new linear imaging technology
- Green laser-like scanning line
- Datalogic's 3GL™ (Three Green Lights) and loud beeper for good-read feedback
- Decoding capability up to 2.5 mils
- Built-in multiple interfaces (RS-232, Keyboard Wedge and USB)
- Ergonomic shape provides hours of tireless data collection for the user
- PBT9100:
  - Bluetooth 3.0 Class 1 compliant; Supports Bluetooth wireless technology SPP and HID profiles; Piconet with up to 7 scanners connected to the same base station
- PM9100:
  - Compatible with Datalogic's STAR Cordless System 2.0; 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; Seamless roaming
- User replaceable Lithium-Ion battery (PBT9100 and PM9100)
- Ethernet connectivity (Standard and Industrial ~ PBT9100 and PM9100)
- EASEOFCARE Service Plans offer a wide range of service options to protect your investment, ensuring maximum productivity and ROI

## INDUSTRIES - APPLICATIONS

- Manufacturing Shop Floor
  - Component Traceability
  - Work-in-Progress
  - Sub-Assembly
  - Quality Control
  - Time and Cost Analysis
  - Control Machines Set-up
  - In-line Inventory Control
- Warehouse and Logistic Centers
  - Shipping / Receiving
  - Parcel Preparation
  - Picking / Put Away
  - Automatic Sorting Back-Up
  - End of Line Sorting



## POWERSCAN 9100 SERIES

# TECHNICAL SPECIFICATIONS

### WIRELESS COMMUNICATIONS

<b>PBT9100</b>	<b>Bluetooth Wireless Technology</b> Maximum number of devices per base station: 7; 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: up to 100 m / 328 ft; Security: Data Encryption; Scanner Authentication
<b>PM9100</b>	<b>Datalogic STAR Cordless System</b> 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: 50 m / 164 ft at 500 KB/s; 100 m / 328 ft at 19.2 KB/s; 910 MHz: 50 m / 164 ft at 500 KB/s; 400 m / 1,312 ft at 36.8 KB/s, frequency hopping 50 m / 164 ft at 36.8 KB/s, fixed channel; Seamless Roaming; Two Way Communications

### DECODING CAPABILITY

<b>9100 Series</b>	GS1 DataBar™ linear codes, UPC/EAN, UPC/EAN P2/P5 add ons, UPC/EAN Coupons, ISBN, Code 128, EAN 128, Code 39, Code 39 Full ASCII, Code 39 CIP, Code 32, Codabar, Interleaved 2 of 5, IATA, Industrial 2 of 5, Standard 2 of 5, Code 11, MSI, Plessey, Code 93, Follet 2/5, Code 4, Code 5, Datalogic 2 of 5, Codablock F
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### ELECTRICAL

<b>PBT9100 / PM9100</b>	<b>Battery:</b> Li-Ion 3350 mA; Reads per Charge: 60,000+ (continuous reading); Charge Time External Power: 4.5 Hours; Host Power: 10 Hours; <b>Cradle Indicator LEDs:</b> Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow); <b>Current:</b> Operating (Typical): External Power: Max. 10 W (charging); POT: Max. 500 mA (charging); <b>Input Voltage:</b> External Power: 10-30 VDC; POT: 5 VDC +/- 10%
<b>PD9100</b>	<b>Current:</b> Operating (Typical): PD9130: 440 mA @ 4.5 V; 380 mA @ 5 V; 75 mA @ 30 V; <b>Input Voltage:</b> 4.5 - 30 VDC

### ENVIRONMENTAL

<b>Ambient Light</b>	Immune to light exposure in offices/facilities and direct exposure to sunlight
<b>Drop Resistance</b>	Withstands 50 drops from 2.0 m / 6.6 ft to concrete
<b>ESD Protection (Air Discharge)</b>	20 kV
<b>Humidity (Non-condensing)</b>	0 - 95%
<b>Particulate and Water Sealing</b>	IP65
<b>Temperature</b>	Operating: -20 to 50 °C / -4 to 122 °F Storage/Transport: -40 to 70 °C / -40 to 158 °F

### INTERFACES

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

<b>Colors Available</b>	Yellow/Black; Other colors and custom logo options are available for minimum quantity purchase
<b>Dimensions</b>	Cradle: 24.0 x 10.8 x 9.5 cm / 9.4 x 4.3 x 3.8 in; All Models: 21.2 x 11.0 x 7.4 cm / 8.3 x 4.3 x 2.9 in
<b>Display (PM9100)</b>	PM9100-D, PM9100-DK: Display Type: Graphic with White Backlight; Font Dimensions: User selectable (6 lines x 21 columns default); Screen Dimensions: 48 x 132 pixels
<b>Keyboard (PM9100)</b>	PM9100-D: 4 Configurable Keys PM9100-DK: 16 Configurable Keys
<b>Weight</b>	PD9100: 340.0 g / 11.9 oz PM9100-XX/ PBT9100-XX: 405.0 g / 14.2 oz PM9100-DXX / PM9100-DKXX: 435.0 g / 15.3 oz

### READING PERFORMANCE

<b>Light Source</b>	Green LED
<b>Print Contrast Ratio (Minimum)</b>	15%
<b>Reading Angle</b>	Pitch: +/- 75°; Roll (Tilt): +/- 45°; Skew (Yaw): +/- 70°
<b>Reading Indicators</b>	Beeper; Datalogic Three Green Lights (3GL™) Good-read Feedback; Datalogic 'Green Spot' on the Code, Dual Good-read LEDs
<b>Resolution (Maximum)</b>	2.5 mils

### 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>Code 39</b>	5 mils: 3.0 to 32.0 cm / 1.2 to 12.6 in 7.5 mils: 2.0 to 48.0 cm / 0.8 to 18.9 in 10 mils: 2.0 to 66.0 cm / 0.8 to 26.0 in 20 mils: 3.0 to 110.0 cm / 1.2 to 43.3 in 40 mils: 3.0 to 230.0 cm / 1.2 to 90.6 in
<b>Code 39</b>	<b>EAN 13</b> 2.0 to 61.0 cm / 1.2 to 24.0 in Note: Reading performances may change with different symbologies

### SAFETY & REGULATORY

<b>Agency Approvals</b>	The product meets necessary safety and regulatory approvals for its intended use. See the Regulatory Addendum for details.
<b>Environmental Compliance</b>	Complies to China RoHS; Complies to EU RoHS
<b>LED Classification</b>	Product compliant according to IEC 62471

### 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)  
BC9030-BT Base/Charger, Multi-Interface  
BC9130-BT Base/Dual Charger, Multi-Interface  
BC9180-BT 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)  
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)

