



### Industrial Handheld Area Imager Bar Code Reader with Datalogic's STAR Cordless System

The PowerScan 8000 product series is Datalogic Scanning's premium line of rugged industrial handheld data collection products. The PowerScan PM8500 cordless area imager offers omnidirectional reading of 1D and 2D codes combined with unlimited mobility guaranteed by the Datalogic STAR Cordless System™.

The PowerScan PM8500 reader's feature a high-resolution Mega-Pixel imaging sensor that is capable of outstanding performance in industrial applications. It is offered in three optic models: Standard Range and High Density models are for typical bar code reading conditions (for medium and high-resolution codes respectively); the Wide Angle model offers a wider field of view allowing the capture of larger and longer codes.

The Datalogic STAR Cordless System for narrow band radio communications provides the key to increased productivity and flexibility in the workplace. It offers scalable solutions from simple point-to-point

applications to networking capabilities. An optional display with a 3-key keypad provides useful information to the operator like time and battery status and enables interaction with the host. The high capacity Lithium-Ion battery can be replaced in few seconds and charged on the cradle as well on a separate multi-battery charger.

The PM8500 readers feature Datalogic's exclusive 3GL™ (3 Green Lights) 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 adds increased visibility at any angle.

The PM8500 reader's mechanics have been developed and tested to withstand extreme environmental conditions maintaining consistent reading capability without degrading performance or reliability. Its ergonomic enclosure is lightweight and well balanced to ensure optimal operator comfort during scan intensive operations. A built-in metal tether hook for suspended applications ensures workplace productivity.



### Features

- Optics available in Standard Range, High Density and Wide Angle
- Datalogic 3GL™ (3 Green Lights) and loud beeper for good read feedback
- Datalogic's instinctive 5-dot aimer
- Omnidirectional reading from contact to 30,0 cm / 11,8 in
- Optional model available with display and 3-key keypad
- 100% Compatible with Datalogic's STAR Cordless System™
- Point-to-point and multi-point transmission
- Seamless roaming
- User replaceable Lithium-Ion battery
- Operates over a wide range of temperatures
- Water and particulate sealing rating: IP65 (without display) / IP64 (with display)
- Drop resistance to 2,0 m / 6,5 ft



# Specifications

## CORDLESS COMMUNICATIONS

DATALOGIC STAR CORDLESS SYSTEM™

Effective Radiated Power: 433,92 MHz: < 10 mW; 910 MHz: < 1 mW  
 Multi-Point Configuration: Max. Readers in Same Area: 2000  
 Max. Readers per Radio Receiver: 32  
 Point-to-Point Configuration: Radio Frequency: 433,92 MHz; 910 MHz  
 Radio Range (Open Air): 433,92 MHz: Up to 50 m / 164 ft  
 910 MHz: Up to 30 m / 98 ft  
 Seamless Roaming; Two Way Communications

## DECODING CAPABILITY

1D / LINEAR CODES

Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes  
 Aztec Code; Aztec Mesas; Data Matrix; MaxiCode; QR Code  
 Australian Post; British Post; Canadian Post; China Post; Japanese Post;  
 KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)  
 EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded  
 Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional;  
 MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

2D CODES

POSTAL CODES

STACKED CODES

## ELECTRICAL

BATTERY

Battery Type: Li-ION 2150 mAh; Charge Time: External Power: 4 Hours;  
 Host Power: 10 hours; Reads per Charge: + 30,000  
 Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow)  
 Operating (Typical): External: 1 A @ 10 VDC, 330 mA @ 30 VDC; POT: 500 mA  
 External: 10 - 30 VDC; POT: 5 VDC +/- 5%

CRADLE INDICATOR LEDS

CURRENT

INPUT VOLTAGE

## ENVIRONMENTAL

AMBIENT LIGHT

DROP RESISTANCE

ESD PROTECTION (AIR DISCHARGE)

HUMIDITY (NON-CONDENSING)

PARTICULATE AND WATER SEALING

TEMPERATURE

0 - 100,000 lux  
 Withstands 50 drops from 2,0 m / 6,6 ft onto a concrete surface  
 20 kV  
 0 - 95%  
 PM8500: IP65; PM8500-D: IP64  
 Operating: -10 to 50 °C / 14 to 122 °F  
 Storage/Transport: -40 to 70 °C / -40 to 158 °F

## INTERFACES

RS-232 / USB / Keyboard Wedge / Wand Multi-Interface; RS-485: BC8060 Only

## PHYSICAL CHARACTERISTICS

COLORS AVAILABLE

DIMENSIONS

Yellow/Black  
 Cradle: 24,0 x 10,8 x 9,5 cm / 9,5 x 4,3 x 3,7 in; PM8500: 20,7 x 11,4 x 6,9  
 cm / 8,1 x 4,5 x 2,7 in; PM8500-D: 21,0 x 11,4 x 6,9 cm / 8,3 x 4,5 x 2,7 in  
 PM8500-D: Display Type: Graphic with backlight  
 Font Dimensions: User selectable (4 lines x 16 columns default)  
 Screen Dimensions: 32 x 96 pixels  
 PM8500-D Only: 3- Key Keypad  
 Cradle: 380,0 g / 13,4 oz; PM8500: 360,0 g / 12,7 oz; PM8500-D: 393,0 g / 13,8 oz

DISPLAY

KEYPAD

WEIGHT

## READING PERFORMANCE

IMAGER SENSOR

LIGHT SOURCE

PRINT CONTRAST RATIO (MINIMUM)

READING ANGLE

READING INDICATORS

1280 x 1024  
 Aiming: 630 - 680 nm VLD; Illumination: LED Array 630 - 670 nm  
 15%  
 Pitch: +/- 35°; Roll (Tilt): 360°; Skew (Yaw): +/- 40°  
 Beeppers, Polyphonic; Datalogic Three Green Lights (3GL™) Good Read  
 Feedback: Datalogic 'Green Spot' on the Code; Dual Good Read LEDs;  
 Good Transmission  
 High Density Model: 1D Codes: 2 mil, PDF417: 3 mil, 2D Codes: 4 mil  
 Standard Model: 1D Codes: 4 mil, PDF417: 4 mil, 2D Codes: 6,6 mil  
 Wide Angle Model: 1D Codes: 5 mil, PDF417: 5 mil, 2D Codes: 7,5 mil

RESOLUTION (MAXIMUM)

## READING RANGES

TYPICAL DEPTH OF FIELD

Minimum distance determined by symbol length and scan angle.  
 Printing resolution, contrast, and ambient light dependent

### PM8500

5 mils: 7,5 to 15,5 cm / 2,9 to 6,1 in  
 10 mils: 5,5 to 24,5 cm / 2,1 to 9,7 in  
 13 mils: 5,0 to 27,0 cm / 1,9 to 10,6 in  
 20 mils: 5,5 to 36,5 cm / 2,1 to 14,4 in  
 5 mils PDF: 8,0 to 18,5 cm / 3,1 to 7,3 in  
 10 mils PDF: 4,0 to 25,5 cm / 1,5 to 10,0 in  
 7,5 mils Data Matrix/QR:  
 8,0 to 16,5 cm / 3,1 to 6,5 in  
 10 mils Data Matrix/QR:  
 7,0 to 19,5 cm / 2,7 to 7,7 in

### PM8500 WA

5 mils: 2,5 to 10,0 cm / 1,0 to 3,9 in  
 10 mils: 2,0 to 16,0 cm / 0,8 to 6,3 in  
 13 mils: 1,5 to 26,0 cm / 0,6 to 10,2 in  
 20 mils: 1,5 to 32,0 cm / 0,6 to 12,6 in  
 5 mils PDF: 3,0 to 10,5 cm / 1,2 to 4,1 in  
 10 mils PDF: 1,5 to 21,5 cm / 0,6 to 8,4 in  
 7,5 mils Data Matrix/QR:  
 5,5 to 8,5 cm / 2,1 to 3,4 in  
 10 mils Data Matrix/QR:  
 3,2 to 12,5 cm / 1,2 to 4,9 in

### PM8500 HD

3 mils: 4,5 to 8,0 cm / 1,7 to 3,1 in  
 5 mils: 3,5 to 9,5 cm / 1,3 to 3,8 in  
 10 mils: 4,0 to 12,5 cm / 1,5 to 5,0 in  
 13 mils: 5,0 to 14,0 cm / 1,9 to 5,5 in  
 20 mils: 6,0 to 18,5 cm / 2,3 to 7,3 in  
 3 mils PDF: 5,0 to 8,5 cm / 1,9 to 3,4 in  
 10 mils PDF: 3,0 to 13,0 cm / 1,1 to 5,2 in  
 4 mils Data Matrix/QR:  
 5,1 to 7,6 cm / 2,0 to 3,0 in  
 10 mils Data Matrix/QR:  
 4,0 to 10,5 cm / 1,5 to 4,1 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.  
 Complies to China RoHS; Complies to EU RoHS  
 Caution Laser Radiation - Do not stare into beam; CDRH Class II;  
 EN 60825-1 Class 1; IEC 60825-1 Class 2

ENVIRONMENTAL COMPLIANCE

LASER CLASSIFICATION

## UTILITIES

DATALOGIC ALADDIN™

Datalogic Aladdin configuration program is available for download at no charge

## WARRANTY

3-Year Factory Warranty



### Base Stations/Chargers

- BC8030-433, BC8030-910 Base/Charger, Multi-Interface
- BC8060-433, BC8060-910 Base/Charger, Multi-Interface/RS-485
- CHR-PM80 Charger (C-8000)
- SBS-PM80 Spare Battery Slot (SBS-8000)

### Batteries/Battery Chargers

- FBP-PM80 Fixed Battery Pack (FBP-8000)
- MC-P080 Multiple Battery Charger (MC-8000)
- RBP-PM80 Removable Battery Pack (RBP-8000)



### Cases/Holders

- 11-0138 Heated Holder, 36 VDC (not for use with PM8500-D models)
- 11-0139 Heated Holder, 24 VDC (not for use with PM8500-D models)
- 11-0140 Heated Holder, 48 VDC (not for use with PM8500-D models)
- HLS-P080 Universal Holster (HLS-8000)
- PC-P080, PCD-P080 Protective Case/Belt Holster

### Mounts/Stands

- 7-0404 Industrial Take-Up Reel
- HLD-P080 Desk/Wall Holder (HLD-8000)
- STD-P080 Hands Free Stand (STD-8000)
- VMK-PM80 Vehicle Mount Kit



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Product specifications are subject to change without notice.

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