



## INDUSTRIAL HANDHELD AREA IMAGER BAR CODE READER WITH DATALOGIC'S STAR CORDLESS SYSTEM

The PowerScan 8000 product series is Datalogic ADC'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



## 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.  
**2D CODES** Aztec Code; Aztec Mesas; Data Matrix; MaxiCode; Micro QR Code; QR Code  
**POSTAL CODES** Australian Post; British Post; Canadian Post; China Post; IMB; Japanese Post; KIX Post; Korea Post; Planet Code; Postnet; Royal Mail Code (RM4SCC)  
**STACKED CODES** EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPCA/E Composites

## ELECTRICAL

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

## ENVIRONMENTAL

**AMBIENT LIGHT** 0 - 100,000 lux  
**DROP RESISTANCE** Withstands 50 drops from 2.0 m / 6.6 ft onto a concrete surface  
**ESD PROTECTION (AIR DISCHARGE)** 20 kV  
**HUMIDITY (NON-CONDENSING)** 0 - 95%  
**PARTICULATE AND WATER SEALING** PM8500: IP65; PM8500-D: IP64  
**TEMPERATURE** Operating: -10 to 50 °C / 14 to 122 °F; Storage/Transport: -40 to 70 °C / -40 to 158 °F

## INTERFACES

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

## PHYSICAL CHARACTERISTICS

**COLORS AVAILABLE** Yellow/Black  
**DIMENSIONS** 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  
**DISPLAY** PM8500-D: Display Type: Graphic with backlight; Font Dimensions: User selectable (4 lines x 16 columns default); Screen Dimensions: 32 x 96 pixels  
**KEYPAD** PM8500-D Only: 3-Key Keypad  
**WEIGHT** Cradle: 380.0 g / 13.4 oz; PM8500: 360.0 g / 12.7 oz; PM8500-D: 393.0 g / 13.8 oz

## READING PERFORMANCE

**IMAGER SENSOR** 1280 x 1024  
**LIGHT SOURCE** Aiming: 630 - 680 nm VLD; Illumination: LED Array 630 - 670 nm  
**PRINT CONTRAST RATIO (MINIMUM)** 15%  
**READING ANGLE** Pitch: +/- 35°; Roll (Tilt): 360°; Skew (Yaw): +/- 40°  
**READING INDICATORS** Beepers, Polyphonic; Datalogic Three Green Lights (3GL™) Good Read Feedback: Datalogic 'Green Spot' on the Code; Dual Good Read LEDs; Good Transmission  
**RESOLUTION (MAXIMUM)** 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

## READING RANGES

**TYPICAL DEPTH OF FIELD** Minimum distance determined by symbol length and scan angle.  
 Printing resolution, contrast, and ambient light dependent.

PM8500	PM8500 WA	PM8500 HD
5 mils: 7.5 to 15.5 cm / 2.9 to 6.1 in	5 mils: 2.5 to 10.0 cm / 1.0 to 3.9 in	3 mils: 4.5 to 8.0 cm / 1.7 to 3.1 in
10 mils: 5.5 to 24.5 cm / 2.1 to 9.7 in	10 mils: 2.0 to 16.0 cm / 0.8 to 6.3 in	5 mils: 3.5 to 9.5 cm / 1.3 to 3.8 in
13 mils: 5.0 to 27.0 cm / 1.9 to 10.6 in	13 mils: 1.5 to 26.0 cm / 0.6 to 10.2 in	10 mils: 4.0 to 12.5 cm / 1.5 to 5.0 in
20 mils: 5.5 to 36.5 cm / 2.1 to 14.4 in	20 mils: 1.5 to 32.0 cm / 0.6 to 12.6 in	13 mils: 5.0 to 14.0 cm / 1.9 to 5.5 in
5 mils PDF: 8.0 to 18.5 cm / 3.1 to 7.3 in	5 mils PDF: 3.0 to 10.5 cm / 1.2 to 4.1 in	20 mils: 6.0 to 18.5 cm / 2.3 to 7.3 in
10 mils PDF: 4.0 to 25.5 cm / 1.5 to 10.0 in	10 mils PDF: 1.5 to 21.5 cm / 0.6 to 8.4 in	3 mils PDF: 5.0 to 8.5 cm / 1.9 to 3.4 in
7.5 mils Data Matrix/QR: 8.0 to 16.5 cm / 3.1 to 6.5 in	7.5 mils Data Matrix/QR: 5.5 to 8.5 cm / 2.1 to 3.4 in	10 mils PDF: 3.0 to 13.0 cm / 1.1 to 5.2 in
10 mils Data Matrix/QR: 7.0 to 19.5 cm / 2.7 to 7.7 in	10 mils Data Matrix/QR: 3.2 to 12.5 cm / 1.2 to 4.9 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.  
**ENVIRONMENTAL COMPLIANCE** Complies to China RoHS; Complies to EU RoHS  
**LASER CLASSIFICATION** Caution Laser Radiation - Do not stare into beam; CDRH Class II; EN 60825-1 Class 1; IEC 60825-1 Class 2

## UTILITIES

**DATALOGIC ALADDIN™** Datalogic Aladdin configuration program is available for download at no charge.  
**REMOTE HOST DOWNLOAD** Available on request

## WARRANTY

**WARRANTY** 3-Year Factory Warranty

## ACCESSORIES



### 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 compatible with the BC8060



### Batteries/Battery Chargers

- FBP-PM80 Fixed Battery Pack (FBP-8000)
- MC-P080 Multiple Battery Charger, 4-Slots (MC-8000)
- RBP-PM80 Removable Battery Pack (RBP-8000)



### Cases/Holsters

- 11-0138 Heated Holder, 36 VDC; 11-0139 Heated Holder, 24 VDC; 11-0140 Heated Holder, 48 VDC (not for use with PM8300-D models)
- HLS-P080 Universal Holster (HLS-8000)
- PC-P080, PCD-P080 Protective Case/Belt Holster (PC-8000)



### 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