



### Industrial Handheld Laser 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 PM8300 cordless laser scanner offers the richest feature set among Datalogic's industrial handheld product offerings.

Narrow band radio communications with Datalogic's STAR Cordless System™ is the key to increased productivity and flexibility in the workplace. It offers scalable solutions from simple point-to-point applications to networking capabilities combined with seamless roaming for complex installations. An optional display with a 3-button keypad provides time and battery status and enables operator interaction with the host system.

The PM8300 reader features Datalogic's exclusive 3 Green Lights (3GL™) 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. Superior reading performance is enhanced by Datalogic's patented PuzzleSolver™ technology for fast and accurate reading of standard, poorly printed and damaged codes.

The PM8300 reader's mechanics have been developed and tested to withstand extreme environmental conditions maintaining consistent reading performance 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.

Multi-interface capabilities feature the most popular interfaces; RS-232, Keyboard Wedge, Wand Emulation and USB. The Datalogic Aladdin™ configuration program provides user-friendly features that simplify the start-up procedure, even for inexperienced users.



### Features

- Optics available in Standard Range (contact up to 1.0 m / 3.3 ft) and Auto Range (10 cm to 10 m / 4.0 in to 33.0 ft)
- Datalogic 3GL™ and loud beeper for good read feedback
- Optional display with 3-Key keypad
- 100% Compatible with Datalogic's STAR Cordless System™
- Radio frequencies available in 433 MHz or 910 MHz
- Point-to-point and multi-point transmission
- Seamless roaming
- Paging function
- User replaceable lithium-ion battery
- Multiple interface (RS-232, Keyboard Wedge, Wand and USB)
- Operates over a wide range of temperatures
- Water and Particulate Sealing Rating: IP65 / 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  
STACKED CODES

Autodiscriminates all standard 1D codes including GS1 Databar™ linear codes  
Code 16K; Code 49

### ELECTRICAL

BATTERY

Battery Type: Li-ION 2150 mAh; Charge Time: External Power: 4 Hours;  
Host Power: 10 Hours; Reads per Charge: + 60,000  
Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow)  
Operating (Typical): External: 1 A @ 10 V, 330 mA @ 30 V; POT: 500 mA  
External: 10 - 30 VDC; POT: 5 VDC +/- 10%

CRADLE INDICATOR LEDS  
CURRENT

INPUT VOLTAGE

### ENVIRONMENTAL

AMBIENT LIGHT  
DROP RESISTANCE  
ESD PROTECTION (AIR DISCHARGE)  
HUMIDITY (NON-CONDENSING)  
PARTICULATE AND WATER SEALING  
TEMPERATURE

Immune to light exposure in offices/facilities and direct exposure to sunlight  
Withstands 50 drops from 2 m / 6.6 ft to concrete  
20 kV  
90%  
M8300: IP65; M8300-D: IP64  
Operating: -20 to 50 °C / -4 to 122 °F  
Storage/Transport: -20 to 70 °C / -4 to 158 °F

### INTERFACES

Keyboard Wedge; RS-232; RS-485 BC8060 Only; USB; Wand

### 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  
PM8300: 20.7 x 11.4 x 6.9 cm / 8.1 x 4.5 x 2.7 in  
PM8300-D: 21.0 x 11.4 x 6.9 cm / 8.3 x 4.5 x 2.7 in  
PM8300-D Only: Display Type: Graphic with backlight; Font Dimensions:  
User selectable (4 lines x 16 columns default); Screen Dimensions: 32 x 96 pixels  
PM8300-D Only: 3-Key Keypad  
Cradle: 380.0 g / 13.4 oz; Reader: 395.0 g / 13.9 oz

DISPLAY

KEYPAD  
WEIGHT

### READING PERFORMANCE

LIGHT SOURCE

630 - 680 nm VLD  
Aiming: 630 - 680 nm VLD, Activated by 'Double-Click' Trigger

PRINT CONTRAST RATIO (MINIMUM)  
READ RATE (MAXIMUM)  
READING ANGLE  
READING INDICATORS

15%  
35 +/- 5 scans/sec.  
Pitch: 5 to 55° / -5 to -55°; Roll (Tilt): +/- 20°; Skew (Yaw): +/- 60°  
Beeper; Datalogic Three Green Lights (3GL™) Good Read Feedback;  
Datalogic 'Green Spot' on the Code, Dual Good Read LEDs; Good  
Transmission

RESOLUTION (MAXIMUM)

PM83X0: 0.076 mm / 3 mils; PM83X0 Auto Range: 0.190 mm / 7.5 mils

### READING RANGES

TYPICAL DEPTH OF FIELD

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

PM8300  
5 mils: 2.1 to 13.3 cm / 0.8 to 5.2 in  
7.5 mils: 3.5 to 24.2 cm / 1.4 to 9.5 in  
10 mils: 2.9 to 42.8 cm / 1.1 to 16.8 in  
13 mils: 2.3 to 55.1 cm / 0.9 to 21.7 in  
20 mils: 6.3 to 78.5 cm / 2.5 to 30.9 in  
40 mils: 2.5 to 97.8 cm / 1.0 to 38.5 in

PM8300 AR  
7.5 mils: 7.0 to 46.5 cm / 2.7 to 18.3 in  
10 mils: 10.8 to 99.9 cm / 4.2 to 39.3 in  
13 mils: 12.7 to 147.3 cm / 5.0 to 58.0 in  
20 mils: 7.0 to 215.9 cm / 2.7 to 85.0 in  
40 mils: 16.0 to 340.0 cm / 6.3 to 133.8 in  
55 mils: 0.2 to 4.1 m / 0.7 to 13.5 ft  
Reflective - 100 mils: 0.5 to 15.0 m / 1.6 to 49.2 ft

### 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 EU RoHS  
Caution Laser Radiation - Do not stare into beam  
CDRH Class II; 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, 4-Slots (MC-8000)
- RBP-PM80 Removable Battery Pack (RBP-8000)



#### Cases/Holsters

- 11-0138 Heated Holder, 36 VDC (not for use with PM8300-D models)
- 11-0139 Heated Holder, 24 VDC (not for use with PM8300-D models)
- 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

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