Industrial Handheld Laser Bar Code Reader with Datalogic's STAR Cordless System™

The PowerScan™ PM8300 cordless laser scanners are Datalogic Scanning's premium line of rugged industrial handheld data collection products for linear codes. The PowerScan PM8300 series includes different models able to satisfy all customers' needs; the PM8300 is the basic cordless model; the PM8300-D intermediate model includes a display and 3-key keypad; and the ultimate PM8300-DK model features a display and a full 16-key keyboard. The PM8300-DK model significantly increases the sophistication of interaction with the host system and opens up new potential uses of the scanner, making it suitable for applications that would normally require a more expensive portable data terminal. The mobile phone-like keyboard allows for the manual entering of bar codes that are not readable and enables easy management of simple code-quantity applications like inventory, picking, receiving, etc.

Narrow band radio communications with Datalogic's STAR Cordless System™ provides 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.

The PM8300 readers feature 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 over 12 m / 4.0 in to over 40.0 ft)
- Available in 3 models: basic, with display and 3-Key keypad, with display and full alphanumeric 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
- Datalogic 3GL™ and loud beeper for good read feedback
- User replaceable lithium-ion battery
- 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™	Point-to-Point Configuration Multi-Point Configuration Effective Radiated Power: 433.92 MHz: <10 mW; 910 MHz: <1 mW Max. Readers in Same Area: 2000 Max. Readers per Radio Receiver: 32 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
STACKED CODES	Code 16K; Code 49; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional

ELECTRICAL

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

ENVIRONMENTAL

AMBIENT LIGHT	Immune to light exposure in offices/facilities and direct exposure to sunlight
DROP RESISTANCE	Withstands 50 drops from 2.0 m / 6.6 ft to concrete
ESD PROTECTION (AIR DISCHARGE)	20 kV
HUMIDITY (NON-CONDENSING)	90%
PARTICULATE AND WATER SEALING	PM8300: IP65; PM8300-D, PM8300-DK: IP64
TEMPERATURE	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	Yellow/Black
DIMENSIONS	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, PM8300-DK: 21.0 x 11.4 x 6.9 cm / 8.3 x 4.5 x 2.7 in
DISPLAY	PM8300-D, PM8300-DK: Display Type: Graphic with backlight; Font Dimensions: User selectable (4 lines x 16 columns default); Screen Dimensions: 32 x 96 pixels
KEYPAD	PM8300-D Only: 3-Key Keypad; PM8300-DK Only: 16-Key Keypad
WEIGHT	Cradle: 380.0 g / 13.4 oz; Reader: 395.0 g / 13.9 oz

READING PERFORMANCE

LIGHT SOURCE	630 - 680 nm VLD Aiming: 630 - 680 nm VLD, Activated by 'Double-Click' Trigger
PRINT CONTRAST RATIO (MINIMUM)	15%
READ RATE (MAXIMUM)	35 +/- 5 scans/sec.
READING ANGLE	Pitch: 5 to 55° / -5 to -55°; Roll (Tilt): +/- 20°; Skew (Yaw): +/- 60°
READING INDICATORS	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.
ENVIRONMENTAL COMPLIANCE	Complies to EU RoHS
LASER CLASSIFICATION	Caution Laser Radiation - Do not stare into beam CDRH Class II; IEC 60825-1 Class 2

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 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 (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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