

# PowerScan® 8300



## Industrial Handheld Laser Bar Code Reader: Desk and Mobile



PowerScan®

## General Description

Datalogic Scanning's PowerScan readers are the top rated industrial handheld data collection products on the market. Synthesizing knowledge and experience, Datalogic Scanning is evolving the PowerScan family to include the PowerScan 8300 series: the new corded and cordless laser bar code readers featuring state-of-the-art performance for rugged industrial use.

**Designed for Productivity:** The PowerScan 8300 readers' ergonomic enclosures are lightweight and well-balanced ensuring optimal operator comfort during scan intensive operations. Multiple good-read feedback features and a built-in metal tether hook for suspended applications ensure workplace productivity. The PowerScan 8300 readers' superior reading performance is enhanced by Datalogic's patented Puzzle Solver™ technology for fast and accurate reading of standard, poorly printed and damaged bar codes.

**Superior Radio Features:** The Datalogic STAR Cordless System™ for narrow band radio communications represents the key to increased productivity and flexibility in the workplace. It offers scalable solutions to solve simple point-to-point applications as well as networking capability combined with seamless roaming for complex projects. An optional display with a 3-button keypad provides time and battery status and enables interaction with the host.

**Performance and Reliability:** The PowerScan 8300 readers' mechanics have been developed and tested to withstand extreme environmental conditions maintaining consistent reading performance. Hard shocks (2 m / 6.5 ft drops), dust and water (IP65/IP64 sealed) and adverse temperature conditions (operative at -30 °C / -22 °F) do not affect product performance or reliability.

**Installation and Configuration Ease:** The PowerScan 8300 readers are offered with a full set of accessories: single and multiple battery chargers, desk/wall holder, belt and forklift holsters and a hands-free stand. All models have multi-interface capabilities built in featuring 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

### PowerScan D8300/M8300

- > Standard Range (contact up to 1 m / 3.3 ft) and Auto Range (10 cm / 4 in to 10 m / 33 ft) optic models available
- > Drop resistance to 2 m / 6.5 ft
- > User interface: loud beeper and Datalogic 3GL™ good read feedback
- > Built-in multiple interface (RS-232, Keyboard Wedge, Wand and USB)
- > Undecoded TTL Laser Out Model

### PowerScan M8300

- > Available with or without display
- > 433 MHz or 910 MHz radio system
- > Point-to-point and multi-point transmission
- > Seamless roaming
- > Paging function
- > 100% compatible with STAR Cordless System™
- > User replaceable Lithium-Ion battery

## Applications

- > Work-in-Progress Control
- > Warehouse Management
- > Shipping and Receiving Control
- > Cash and Carry Retail Applications
- > Forklift Warehouse Applications

# PowerScan® 8300

## Industrial Handheld Laser Bar Code Reader

### Specifications

#### MODELS

LIGHT SOURCE  
MAX. SCAN RATE  
MAX. RESOLUTION  
PRINT CONTRAST RATIO (min)  
READING ANGLE  
READING INDICATORS  
BAR CODES

#### PowerScan D8300 (corded) & PowerScan M8300 (cordless)

Visible Laser Diode (VLD) 630 - 680 nm  
35 ± 5 scans/sec  
0.076 mm/3 mil (D/M83X0); 0.19 mm/7.5 mil (D/M83X0 Auto Range)  
15%  
Skew: ±60°; Pitch: 5 to 55°, -5 to -55°; Tilt: ±20°  
Laser ON, 3 GL™ Feedback, Beeper, Good Transmission (M8300 only)  
2/5 Family, Code 39 (plus Code 32, Cip 39), EAN/UPC, EAN 128,  
Code 128, Code 93, CODABAR, Code 49, Code MSI, Code 11, Code 16K,  
ISBN/ISSN, ISBT 128, GS1 DataBar™ (formerly RSS)

#### PROGRAMMING METHOD

Manual  
Automatic  
Datalogic Aladdin™

ENHANCED FEATURES  
AMBIENT LIGHT CONDITIONS  
HUMIDITY

Reads special bar codes  
Software commands through the RS-232 / USB interfaces  
Windows configuration program  
Puzzle Solver™, data editing and concatenation  
Immune to light exposure in offices, facilities, and direct exposure to sunlight  
90% non condensing

#### MODELS

POWER SUPPLY  
CONSUMPTION

#### PowerScan D8300

4 to 30 VDC  
420 mA @ 4 V; 310 mA @ 5 V; 62 mA @ 30 V (D8330)  
500 mA @ 4 V; 370 mA @ 5 V; 70 mA @ 30 V (D8340)  
USB, RS-232, Keyboard Wedge, Wand Emulation (D8330),  
TTL Laser Out (D8340)

#### INTERFACES

OPERATING TEMPERATURE  
STORAGE TEMPERATURE  
DROP RESISTANCE  
WEIGHT  
ENVIRONMENTAL PROTECTION

-30 to 50 °C / -22 to 122 °F  
-30 to 70 °C / -22 to 158 °F  
Withstands 50 drops from 2 m / 6.5 ft to concrete  
Approx. 295 g / 10.4 oz  
IP65

#### MODELS

DISPLAY (M8300/D models only)

#### PowerScan M8300

Graphic with backlight, 32 x 96 dots, and font dimension can be selected by the user (with default selection, 4 lines x 16 columns)

KEYPAD (M8300/D models only)

3 keys

BATTERY TYPE

Li-Ion 2150 mAh

RECHARGE TIME

External: max. 4 hrs / Host: max. 10 hrs

OPERATING AUTONOMY

Over 60,000 operations

OPERATING TEMPERATURE

-20 to 50 °C / -4 to 122 °F

STORAGE TEMPERATURE

-20 to 70 °C / -4 to 158 °F

DROP RESISTANCE

Withstands 50 drops from 2 m / 6.5 ft to concrete

WEIGHT

Approx. 395 g / 13.9 oz

ENVIRONMENTAL PROTECTION

IP65 (without display)

IP64 (with display)

#### CRADLE

POWER SUPPLY

POWER CONSUMPTION

READING INDICATORS

INTERFACES

DIMENSIONS

(without antenna)

WEIGHT

**RADIO SPECIFICATIONS**

RADIO FREQUENCY

433.92 MHz

BIT RATE

19,200 bauds (433.92 MHz),  
36,800 (910 MHz)

EFFECTIVE RADIATED POWER

<10 mW (433.92 MHz);  
<1 mW (910 MHz)

RADIO RANGE

Up to 50 m / 164 ft (433.92 MHz);  
Up to 30 m / 99 ft (910 MHz),  
depending on the working area

MAX. NUMBER COEXISTING SYSTEMS

Max. 32 readers per radio receiver; max  
2000 readers in the same area

SAFETY & REGULATORY

ELECTRICAL

Complies to C-CSA-US (60950 to Canada  
and USA)

EMISSIONS

LASER CLASSIFICATION

Complies to FCC-A, EN 55022-B, AS/NZS 3548  
CDRH Class II, (Caution: Laser Radiation - do  
not stare into beam)

RADIO

IEC 60825-1 Class 2 

ETSI-ETS 300220; FCC 15.249. For a  
complete list of approvals by country, contact  
your Datalogic Scanning Representative.

Complies to EU RoHS.

RESTRICTION OF HAZARDOUS SUBSTANCES

### Accessories



Multi Battery Charger, MC-8000



Base/Charger, BC-8060



Spare Battery Slot, SBS-8000  
Removable Battery Pack, RBP-8000

#### STD-8000 Hands-free Stand

Allows use of the reader in hands-free mode.

#### BC-8060 Base/Charger

Radio base station and reader charger. Includes RS-232, RS-485, Keyboard Wedge, Wand Emulation and USB interfaces. Compatible with the Spare Battery Slot (SBS-8000).

#### BC-8030 Base/Charger

Radio base station and reader charger. Includes RS-232, Keyboard Wedge, Wand Emulation and USB interfaces.

#### C-8000 Charger

Compatible with the Spare Battery Slot (SBS-8000).

#### SBS-8000 Spare Battery Slot

Coupled with BC-8060 or C-8000, allows spare batteries to be charged.

#### MC-8000 Multiple Battery Charger

Accommodates charging of up to 4 batteries.

#### HLD-8000 Desk/Wall Holder

Provides installation flexibility.

#### HLS-8000 Universal Holster

Allows the reader to be attached to desktops, worktables, forklift trucks and other types of support.

#### PC-8000 Protective Case/Belt Holster

Allows the reader to be worn on a belt when not in use and protects it against drops.

#### RBP-8000 Removable Battery Pack

Click on/off battery without screw for easy battery replacement and "stand-alone" charging.

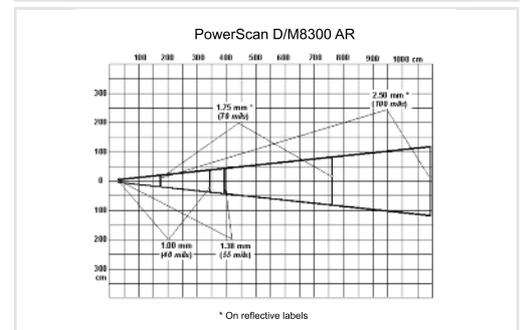
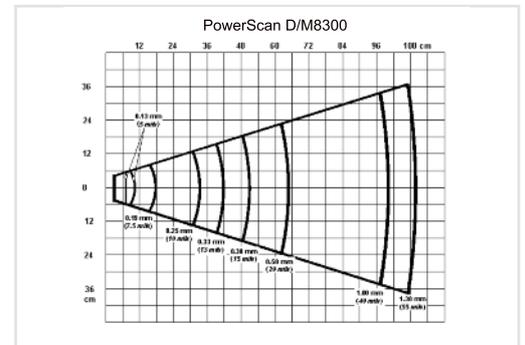
#### VMK-8000 Vehicle-Mount KIT

Kit of accessories allows easy and secure installation of BC-8030/BC-8060 cradle on forklift.

#### HH-8000 Heated Holder

Holder specifically designed for freezer applications.

### Reading Diagrams



**NOTE:** Typical performance at 20 °C / 68 °F on high quality bar codes (Code 39)



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