



### Industrial Handheld Linear Imager Bar Code Reader with Bluetooth® Wireless Technology

The PowerScan 7100 product series are Datalogic Scanning's value line of rugged industrial handheld data collection products. The PowerScan PBT7100 linear imaging bar code reader with Bluetooth® wireless technology offers operator freedom from cable entanglement, rugged durability and extremely snappy reading performance all at an affordable price.

Datalogic Scanning's innovative and unique optical design of the PowerScan 7100 series of readers combines features that are normally available on different models into a single device: up to 3 mils maximum code resolution; contact to over 3.0 m / 9.8 ft reading distance on standard paper labels; and wide angle code reading. The result is a versatile, easy to use and intuitive scanner that simplifies any code reading activity.

Together high-speed digital hardware and Datalogic Scanning's advanced decoding algorithms produce read rates up to 390 scans per second, making the PowerScan 7100 readers the fastest industrial scanners available. This is why the 7100's are especially suitable for "high-

speed" applications where thousands of codes have to be read in a very short period of time.

Bluetooth® wireless technology can be implemented through the base station or by connecting the scanner directly to any commercial or embedded Bluetooth® compliant device allowing an operator mobility range of up to 100 m / 328 ft.

The base station is offered with two different multi-interface combinations; the Standard multi-interface includes RS-232, Keyboard Wedge, Wand Emulation and USB; the POS multi-interface set includes RS-232, IBM46xx and USB.

A loud beeper and Datalogic's exclusive patented 'Green Spot' directly on the code, provide intuitive good read feedback in noisy environments. The Datalogic Aladdin™ configuration program provides user-friendly features that simplify the start-up procedure, even for inexperienced users.

Light weight and instinctive usage combined with outstanding speed-to-read makes the PowerScan 7100 product series the ideal solution for intensive code reading applications.



### Features

- Fastest speed-to-read - 390 scans/second
- Datalogic 'Green Spot' and loud beeper for good read feedback
- Bluetooth Wireless Technology with up to 100 m / 328 ft range
- Connectivity through the Base Station or directly to other Bluetooth devices
- Water and particulate sealing rating: IP65
- Drop resistance to 2.0 m / 6.5 ft
- 25kV Electrostatic protection (air discharge)
- Model option with aimer for optimal code pointing



# Specifications

## CORDLESS COMMUNICATIONS

BLUETOOTH WIRELESS TECHNOLOGY

Protocol: Bluetooth 2.0 Certified Class 1  
Radio Frequency: 2.40 to 2.48 GHz  
Radio Range (Open Air): 100.0 m / 328.1 ft

## DECODING CAPABILITY

1D / LINEAR CODES

Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes  
China Post  
GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional

POSTAL CODES  
STACKED CODES

## ELECTRICAL

BATTERY

Battery Type: Lithium-Ion, 2400 mAh  
Charge Time: External Power: 4 Hours  
Reads per Charge: 22,000 in 16 Hours  
Operating (Typical): BC70X0: 280 mA @ 5 VDC  
Standby/Idle (Typical): BC70X0: 210 mA @ 5 VDC  
5 VDC +/- 5% ; 7 - 14 VDC

CURRENT

INPUT VOLTAGE

## ENVIRONMENTAL

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

100,000 lux  
Withstands 50 drops from 2.0 m / 6.6 ft onto a concrete surface  
25 kV  
5 - 95%  
IP65  
Operating: -20 to 50 °C / -4 to 122 °F  
Storage/Transport: -40 to 60 °C / -40 to 140 °F

## INTERFACES

RS-232 / IBM 46XX / USB Multi-Interface  
RS-232 / USB / Keyboard Wedge / Wand Multi-Interface

## PHYSICAL CHARACTERISTICS

COLORS AVAILABLE  
DIMENSIONS

WEIGHT

Black; Yellow/Black  
Cradle: 23.9 x 11.7 x 4.8 cm / 9.4 x 4.6 x 1.9 in  
Reader: 20.3 x 7.6 x 11.4 cm / 8.0 x 3.0 x 4.5 in  
Cradle: 326.2 g / 11.5 oz  
Reader: 354.4 g / 12.5 oz

## READING PERFORMANCE

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

Aiming: 630 - 680 nm VLD  
LED Array 630 - 670 nm  
15%  
390 reads/sec.  
Pitch: +/- 65°; Roll (Tilt): +/- 30°; Skew (Yaw): +/- 65°  
Beeper (Adjustable Tone and Volume); Datalogic 'Green Spot' Good Read Feedback; Good Read LED

RESOLUTION (MAXIMUM)

0.076 mm / 3 mils

## READING RANGES

TYPICAL DEPTH OF FIELD

Minimum distance determined by symbol length and scan angle. Printing resolution, contrast, and ambient light dependent.  
5 mils: 1.5 to 14.0 cm / 0.6 to 5.5 in  
7.5 mils: 0 to 44.0 cm / 0 to 17.3 in  
10 mils: 0 to 60.0 cm / 0 to 23.6 in  
13 mils: 0 to 80.0 cm / 0 to 31.5 in  
20 mils: 0 to 119.0 cm / 0 to 46.9 in  
40 mils: 2.0 to 240.0 cm / 0.8 to 94.5 in  
Reflective - 55 mils: 5.0 to 300.0 cm / 2.0 to 118.1 in  
Reflective - 100 mils: 13.0 to 530.0 cm / 5.1 to 208.7 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; EN 60825-1 Class 1

ENVIRONMENTAL COMPLIANCE  
LASER CLASSIFICATION

## UTILITIES

DATALOGIC ALADDIN™

Datalogic Aladdin configuration program is available for download at no charge  
Lowers service costs and improves operations

REMOTE HOST DOWNLOAD

## WARRANTY

3-Year Factory Warranty

### Base Stations/Chargers

- BC7010 Base/Charger, RS-232 / IBM 46XX / USB Multi-Interface
- BC7030 Base/Charger, RS-232 / USB / Keyboard Wedge / Wand Multi-Interface

### Batteries/Battery Chargers

- 11-0202 Battery Charger, 4 Station, US T&L
- 11-0203 Battery Charger, 4 Station, US Std
- 11-0204 Battery Charger, 4 Station, Europe
- 11-0205 Battery Charger, 4 Station, UK
- 11-0234 Battery Pack



### Cases/Holders

- 11-0138 Heated Holder, 36 VDC
- 11-0139 Heated Holder, 24 VDC
- 11-0140 Heated Holder, 48 VDC



### Mounts/Stands

- 11-0110 Hands Free Stand
- 11-0111 Universal Mounting Kit
- 7-0404 Industrial Take-Up Reel

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by Datalogic Scanning Inc. is under license.

© 2009-2010 Datalogic Scanning Inc.

All rights reserved. • Protected to the fullest extent under U.S. and international laws.  
• Copying or altering of this document is prohibited without express written consent from Datalogic Scanning, Inc.  
Datalogic is a registered trademark of Datalogic S.p.A. in many countries and the Datalogic logo and Datalogic Aladdin are trademarks of Datalogic S.p.A. • PowerScan is a registered trademark of Datalogic Scanning Inc.  
Other brand and product names may be trademarks of their respective owners. Product specifications are subject to change without notice.

DS-POWERSCANPBT7100-ENA4 20100709

[www.scanning.datalogic.com](http://www.scanning.datalogic.com)