



Industrial Handheld Laser Bar Code Scanner with Bluetooth® Wireless Technology

The PowerScan™ 8300 series of laser scanners are Datalogic Scanning's premium line of rugged industrial handheld data collection products for linear codes. The PowerScan PBT8300 laser scanner features the standard Bluetooth® wireless technology combined with the outstanding reliability and reading performance found in PowerScan products.

Based on the Bluetooth 2.0 standard, the PowerScan PBT8300 scanner is easily configured to be compliant with Class 1 or Class 2 requirements, according to the mobility range desired, allowing for distances that exceed 90 m / 295 ft in open air. Connectivity is implemented through the receiving base station, which communicates to the host through a choice of interfaces (Serial, USB, Keyboard Wedge or Wand Emulation), or by connecting the scanner directly to any commercial or embedded Bluetooth® compliant device.

The PowerScan PBT8300 scanner mounted on a forklift with a Vehicle Mount Terminal (VMT) provides an excellent solution for warehouse applications. The PowerScan PBT8300 is available in three different models: a basic cordless model (PBT8300); an intermediate model with a display and 3-key keypad (PBT8300-D); and the advanced model (PBT8300-DK) which features a display and a full 16-key alphanumeric keyboard. The PBT8300-DK model additionally includes an embedded code-quantity application, for use in inventory, picking or receiving applications. All PowerScan PBT8300 models are available with reading optics for Standard Range (SR) or Auto Range (AR) for reading distances up to 12.5 m / 41.0 ft. PowerScan bar code readers are the ultimate industrial handheld devices, designed and constructed to withstand the toughest environmental conditions in demanding applications, offering lasting performance and outstanding reliability combined with exceptional reading performance and accuracy.



Features

- Bluetooth® 2.0 Compliant: Class 1 or Class 2 configurable via software
- Supports Bluetooth® wireless technology SPP and HID profiles
- Piconet with up to 4 scanners connected to the same base station
- Optics available in Standard Range (contact up to 1.0 m / 3.3 ft) and Auto Range (20 cm / 8 in up to 12.5 m / 41.0 ft)
- 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
- Drop resistance to 2.0 m / 6.5 ft



Specifications

CORDLESS COMMUNICATIONS

BLUETOOTH WIRELESS TECHNOLOGY

Piconet: Max. Readers per Radio Receiver: 4
 Profiles: HID (Human Interface Device); SPP (Serial Port Profile)
 Protocol: Bluetooth 2.0 Certified Class 1 or Class 2 (configurable)
 Radio Frequency: 2.40 to 2.48 GHz;
 Radio Range (Open Air): Class 1: Exceeds 90 m / 295 ft radio range;
 Class 2: Exceeds 40 m / 131 ft radio range
 Range distances are measured using the base station. Range with connection to other Bluetooth peripherals may show different results.
 Security: Data Encryption; Scanner Authentication

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: Lithium-Ion, 2150 mAh
 Charge Time: External Power: 4 Hours; Host Power: 10 hours
 Reads per Charge: > 50,000
 Battery Charging (Red); Charge Completed (Green); Power/Data (Yellow)
 Operating (Typical): 1 A @ 10 VDC, 330 mA @ 30 VDC, POT: 500 mA
 10 - 30 VDC, POT: 5 VDC +/- 10%

CRADLE INDICATOR LEADS

CURRENT INPUT VOLTAGE

ENVIRONMENTAL

AMBIENT LIGHT

Immune to light exposure in offices/facilities and direct exposure to sunlight.

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

Withstands 50 drops from 2.0 m / 6.6 ft onto a concrete surface.
 20 kV
 90%
 PBT8300: IP65; PBT8300-D, PBT8300-DK: IP64
 Operating: -20 to 50 °C / -4 to 122 °F
 Storage/Transport: -20 to 70 °C / -4 to 158 °F
 RS-232 / USB / Keyboard Wedge / Wand Multi-Interface

INTERFACES

PHYSICAL CHARACTERISTICS

DIMENSIONS

Cradle: 24.0 x 10.8 x 9.5 cm / 9.5 x 4.3 x 3.7 in
 PBT8300: 20.7 x 11.4 x 6.9 cm / 8.1 x 4.5 x 2.7 in
 PBT8300-D, PBT8300-DK: 21.0 x 11.4 x 6.9 cm / 8.3 x 4.5 x 2.7 in
 Display Type: PBT8300-D, PBT8300-DK: Graphic with backlight
 Font Dimensions: PBT8300-D only: User selectable (4 lines x 16 columns default)
 Screen Dimensions: 32 x 96 pixels
 PBT8300-D Only: 3-Key Keypad; PBT8300-DK: 16-Key Keypad
 Cradle: 380.0 g / 13.4 oz; PBT8300: 380.0 g / 13.4 oz
 PBT8300-D: 410.0 g / 14.4 oz; PBT8300-DK: 420.0 g / 14.8 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 (Adjustable Tone and Volume); Datalogic Three Green Lights (3GL™) Good Read Feedback; Datalogic 'Green Spot' on the Code;
 Dual Good Read LEDs; Good Transmission
 PBT83X0: 0.076 mm / 3 mils; PBT83X0 Auto Range: 0.190 mm / 7.5 mils

RESOLUTION (MAXIMUM)

READING RANGES

TYPICAL DEPTH OF FIELD

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

PBT8300

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

PBT8300 AR

7.5 mils: 18.0 to 50.0 cm / 7.0 to 19.7 in
 10 mils: 18.0 to 85.0 cm / 7.0 to 33.5 in
 15 mils: 15.0 to 165.0 cm / 5.9 to 65.0 in
 20 mils: 12.0 to 210.0 cm / 4.7 to 82.7 in
 40 mils: 18.0 to 375.0 cm / 7.0 to 147.6 in
 55 mils: 25.0 to 485.0 cm / 9.8 to 15.9 ft
 Reflective -100 mils: 1.5 to 12.5 m / 4.9 to 41.0 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 China RoHS; Complies to EU RoHS
 Caution Laser Radiation - Do not stare into beam; CDRH Class II;
 EN 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

Accessories



Base Stations/Chargers

- BC8030-BT Base/Charger Multi-Interface
- CHR-PM80 Charger (C-8000)



Batteries/Battery Chargers

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



Cases/Holders

- 11-0138 Heated Holder, 36 VDC (not for use with PBT8300-D/-DK models)
- 11-0139 Heated Holder, 24 VDC (not for use with PBT8300-D/-DK models)
- 11-0140 Heated Holder, 48 VDC (not for use with PBT8300-D/-DK models)
- HLS-P080 Universal Holster (HLS-8000)
- PC-P080, PCD-P080 Protective Case/Belt Holster (PC-8000, PC-8000-D)



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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DS-POWERSCANPBT8300-ENA4 20110303

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