

# PowerScan™ RF

Industrial Bar Code Scanners



#### Ideal for:

- Warehousing and Shipping/Receiving
- Logistics and Transportation
- Outdoor Applications
- Retail POS

#### Features:

- Wireless operation up to 150' / 46 m away from the base station
- Operates up to 8 hours on a single charge
- Scanner & Base Station are IP54 rated for dust and wind-blown rain
- QuadraLogic™ II decoding software for superior scanning performance
- Multi-point operation allows for multiple scanner communications to a single base station

#### A Tough *Portable* Tool for your Toughest Jobs

Freedom! Are restrictive interface cables keeping you from doing business the way you want? Are you restricted to scanning only in the 25' / 7.6 m area around your host terminal? Well, not anymore!

With the PSC PowerScan RF wireless scanner, you now have the freedom to go where the work is, not the other way around. Now you only have to take the 12.7 oz./360 g PowerScan RF scanner to the 500 lb. / 227 kg pallet; not the pallet to the scanner.

Utilizing the latest in Radio Frequency (RF) technology, the PowerScan RF has a range of up to 150' / 46 m. This allows you the freedom to scan pallets at the other end of the loading dock or boxes at the end of a warehouse aisle up to 150' / 46 m from your host terminal. Its unique acknowledgment tone lets you know that your data transmission was successful. With multi-point capability, the PowerScan RF allows you to assign multiple scanners to a single base station, thereby increasing throughput and reducing the cost of additional base stations and host terminals.

The convenient base/docking station charges the battery every time the scanner is inserted. The PowerScan RF can operate up to 8 hours or more on a single charge of the battery pack. Changing the battery is a quick 5 second job. An optional four-station battery charger lets you charge up to four battery packs at a time. The base station can be mounted on a counter, a wall or even a fork truck. The uniquely designed latch keeps the scanner in place even if your fork truck is going over floor grates or speed bumps.

#### Built for Rugged Industrial Environments

The Powerscan RF is based on the original PowerScan laser scanner, the first scanner designed from the ground up for rugged industrial use. The RF scanner meets the same tough environmental standards such as an IP54 rating for dust and wind blown rain. And a drop specification of multiple 6.5' / 2 m drops to concrete!

All models of PowerScan RF have the same rugged features that have made PowerScan scanners the choice for tough industrial applications.

- High impact enclosure with protective rubber cushioning.
- Frictionless scan mechanism.
- Shock mounted optical components.
- Diamond-coated, shatter-proof window.
- Flash memory for easy field upgrades.

#### 4 Different Models To Fit Your Needs

If you need to read small, high density labels at 2" / 5 cm or reflective labels at 36' / 11 m up on the side of a warehouse storage rack, there is a model for you. The PowerScan RF models include High Density (HD), Standard Range (SR), Long Range (LR) and Extra Long Range (XLR). And every model is equipped with QuadraLogic™ II decoding software to read torn, disfigured and poorly printed labels.



# Specifications

PowerScan™ RF

## Mechanical

### Dimensions

Scanner: 9.4 x 4.0 x 2.8" / 23.9 x 10.2 x 7.1 cm

### Base Station:

10.5 x 3.5" x 2.5" / 26.7 x 8.9" x 6.4 cm –

\*width is 4.2" / 10.7 cm including mounting knobs

### Weight

Scanner: 12.7 oz. / 360 g

Base Station: 16 oz. / 454 g

## Optical

**Light source:** Extra Bright 650nm

Visible Laser Diode (VLD)

**Scan system:** Frictionless flexure mechanism

**Rate:** 37 scans/sec. nominal

**Print contrast ratio:** 25% minimum

**Pitch:** ±65°

**Skew:** ±55°

### Ambient light immunity

Artificial light: 1,200 foot candles / 12,900 Lux

Sunlight: 8,000 foot candles / 86,100 Lux

## Decoding Capability (autodiscriminates between)

- UPC/EAN/JAN
- Code 39
- Code 39 full ASCII
- Pharmacode 39
- Code 93
- MSI Plessey
- Code 128
- EAN128
- Interleaved 2 of 5
- Standard 2 of 5
- Codabar

## Electrical

### Voltage

Operating – Scanner: 2.4 VDC (NiMH batteries)

### Operating current – nominal

Scanner: 200mA @ 2.45 VDC

(6000 scans per charge)

### Input Power Requirements

Base Station

US: 110V ± 10%, 60 Hz;

Europe: 220V ± 10%, 50 Hz

**Battery Charge Time:** 4 hours (90%),

6 hours (100%)

## Communications

### Host:

- RS232C Serial
- PC (XT, AT, PS2)
- USB Keyboard
- Universal Keyboard Wedge (supports over 2,000 PCs and Terminals)

### Radio:

- Multi-point operation up to 8 scanners to one base station
- Channels – 10 each, software selectable
- Range - 150' / 46 m line of sight
- Frequency range (varies by country) –  
902 MHz - 928 MHz;  
433.05 MHz - 434.79 MHz

## Environmental

### Temperature rating

Operating: 14° to 122° F / -10° to 50° C

Storage: -4° to 140° F / -20° to 60° C

**Humidity:** 5 to 95% non-condensing

**Shock (at 23°C)**

Scanner: multiple 6.5' / 2 m drops to concrete;

Base Station: multiple 4' / 1.2 m drops to concrete

**Vibration:** meets MIL-STD-810E

## Safety / Regulatory

**Electrical:** Complies to: TÜV; UL; cUL

**Emissions:** Complies to: FCC-A; EN 55022-B;

BCIQ CNS13438; AS/NZS 3548

**Laser classification:** CDRH Class II;

(CAUTION: Laser Radiation –

do not stare into beam);

IEC 60825 Class 2

Radio: ETSI-ETS-300 220;

FCC Part 15.249

(For a complete list of approvals by country

contact your PSC representative)



Depth-of-Field Chart - (printing resolution, contrast and ambient light dependent)				
Label Density Paper Labels	Standard Range (Decoded, Code 39) Range	High Density (Decoded, Code 39) Range	Long Range (Decoded, Code 39) Range	Extra Long Range (Decoded, Code 39) Range
2.5 mil		1.25" to 2.0" / 3.2 to 5.1 cm		
3 mil		1.0" to 2.25" / 2.5 to 5.7 cm		
4 mil		1.0" to 3.0" / 2.5 to 7.6 cm		
5 mil	3.0" to 6.0" / 7.6 to 15.2 cm	0.7" to 4.0" / 1.8 to 10.2 cm		
7.5 mil	2.0" to 10.0" / 5.1 to 25.4 cm	0.5" to 4.5" / 1.3 to 11.4 cm	8" to 13" / 20 to 33 cm	
10 mil	1.0" to 16.0" / 2.5 to 40.6 cm	0.5" to 5.0" / 1.3 to 12.7 cm	7" to 20" / 18 to 51 cm	
15 mil	0.5" to 27.0" / 1.3 to 68.6 cm		7" to 32" / 18 to 81 cm	3.3' to 5.0' / 102 to 152 cm
20 mil	0.5" to 36.0" / 1.3 to 91.4 cm		6" to 4.0" / 15 to 122 cm	2.3' to 6.0' / 71 to 183 cm
40 mil	5.0" to 48.0" / 12.7 to 122.0 cm		9" to 7.0" / 23 to 213 cm	2.3' to 12.0' / 71 to 366 cm
55 mil	6.0" to 60.0" / 15.2 to 152.0 cm		15" to 9.0" / 38 to 274 cm	3.3' to 15.0' / 102 to 457 cm
<b>Reflective Labels</b>				
40 mil			20" to 8.3' / 56 to 254 cm	3.3' to 15.0' / 102 to 457 cm
70 mil			40" to 15.0' / 101 to 457 cm	6.7' to 25.0' / 203 to 762 cm
100 mil			40" to 22.0' / 116 to 671 cm	6.7' to 36.0' / 203 to 1097 cm



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