

# Falcon<sup>®</sup> 4220

Windows<sup>®</sup> CE .NET PDA



#### Features:

- Intel<sup>®</sup> XScale<sup>™</sup> PXA255 400MHz processor
- Windows CE .NET 4.2 Operating System
- Integrated bar code scanner (Laser or Linear Imager)
- Ruggedized (IP54 & 4' Drop)
- Optional Handle for Scan Intensive Applications
- Open Architecture – user accessible SD and CF slot
- 802.11b Wireless LAN (optional)
- Optional Docking Station with spare battery charger

The Falcon<sup>®</sup> 4220 is PSC's latest generation PDA device, combining a compact, ruggedized form factor with the flexibility of Microsoft's CE .NET operating system. The Falcon 4220 is designed for retail, warehousing and logistics applications where maximum performance and durability is required in a compact handheld device.

#### Performance is Power

Under the hood, the Falcon 4220 uses cutting edge technologies from the leaders in mobile and wireless technology, such as Microsoft, Intel, Agere and others. The Falcon 4220 features the Intel<sup>®</sup> XScale<sup>™</sup> PXA255 400MHz processor and the Microsoft<sup>™</sup> Windows CE .NET operating system, providing you with the power and flexibility to deploy sophisticated mobile applications in your enterprise.

The Intel XScale processor provides you with the highest performing mobile processor available today along with advanced power management capabilities for extended battery life. Microsoft's Windows CE .NET operating system gives you the freedom to select the software solution that best meets your needs.

#### Rugged Yet Versatile

The Falcon 4220 is designed from the ground up for rugged applications. With its IP54 sealing, 4 foot (1.2m) repeated drops to concrete, and wide operating temperature range, the Falcon 4220 stands up to most any demanding application.

#### Easy To Read Color Display

The Falcon 4220 incorporates the latest technology in Color TFT displays. With its super-bright, high contrast display, the 4220 works as well outdoors as it does inside. The integrated touchscreen allows for pen/touch based input and handwriting recognition.

#### Maximum Flexibility

The Falcon 4220 offers maximum flexibility with both a user accessible Compact Flash (CF) slot and a Secure Digital (SD) slot.



# Specifications

Falcon® 4220

## Mechanical

### Dimensions

Length: 6.6" / 16.8 cm  
Width: 3.1" / 7.8 cm  
Height: 1.3" / 3.3 cm

### Weight

With battery 12.7 oz / 360 g  
Without battery 11.1 oz / 315 g

### Display

3.5" / 8.9 cm 240 x 320 graphic, transfective TFT  
256,000 colors  
Sunlight readable (for outdoor use)

### Keypad

17 plus 4-way navigation

### Construction

Industrial, high-strength polycarbonate/  
ABS-blend plastic

## 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% NC

### Shock: multiple 4.0' / 1.2m drops to concrete

### Water & Dust: IEC529 rating IP54

## Optical

### Laser

#### Light source:

650nm VLD

#### Scan rate:

39 scans/second nominal

#### Depth of Field: see chart below

### Linear Imager

#### Light source:

617nm Highly Visible LED

#### Scan rate:

Up to 200 scans/second

#### Depth of Field: see chart below

## LASER Depth-of-Field Chart –

(printing resolution, contrast and ambient light dependent,  
\* Minimum distance determined by symbol length and scan angle)

Label Density	Typical Range	
5 mil	2.2" to 5.0"	5.6 to 12.7 cm
7.5 mil	1.8" to 7.5"	4.6 to 19.1 cm
10 mil	2.0" to 9.7"	5.1 to 24.6 cm
13 mil	2.0" to 12.0"	5.1 to 30.5 cm
20 mil	* to 15.0"	* to 38.1 cm
40 mil	* to 22.0"	* to 55.9 cm
55 mil	* to 29.0"	* to 73.7 cm

## Decoding Capability (autodiscriminates between)

### ID Scan Engine

- Code 4
- Code 32/Italian Pharmacy
- Code 39
- Code 128/UCC EAN 128
- China Postage/Datalogic 25
- EAN-8 Convert to EAN -13
- EAN-13/UPC-A
- Industrial 2 of 5
- ISBN
- Matrix 2 of 5
- UPC-E Convert to UPC-A
- UPC-EAN Add-on 2/5
- Code 11
- Code 93
- Codabar/NW7
- EAN-8/JAN-8
- IATA-25
- Interleaved 2 of 5
- Korea Code 35
- MSI/Plessey
- UPC-E

### Indicators

- One triple-color LED for ALARM notification (R) and charger indicator (G/B)
- One dual-color LED for scanner indicator

## Safety and Regulatory

**Battery:** EN60950, UL60950-1

**Electrical:** EN60950, UL60950, CSA 60950,

**Emissions:** FCC Part 15-B, VCCI, CISPR 22

**Radio:** FCC Part 15-C, R&TTE

**Linear Imager Safety:** Class 1 LED (Europe)

**Laser classification:** CDRH Class II;

(CAUTION: Laser Radiation –  
do not stare into beam)  
IEC 60825-1



## System

### Operating System

Windows® CE .NET 4.2

### Microprocessor

Intel® XScale™ PXA255, 400 MHz

### Memory

64MB flash ROM  
64MB SDRAM

### Communication Ports

Infrared: One IrDA 1.2 compliant port  
Serial: RS232 via optional cable or cradle  
USB: Supports USB v1.1 both host and client (dock and terminal)

### I/O Slots

One SD card slot  
One Compact Flash Type II slot (3.3V)

### Audio

One mono speaker  
2.5mm stereo earphone jack with  
microphone input (headset)

### Power Options

1800mAh Li-Polymer removable/rechargeable battery  
Optional 2700mAh hour battery  
25mAh rechargeable backup battery ( Holds system data at least 2 hours without main battery)  
AC adapter with 100-240 Vac, 50-60Hz  
Support for Xscale application modes including:  
Turbo Mode, Normal Mode, Idle Mode, Sleep Mode

### Radio Support

Optional integrated 802.11b

### System Support

VT100/220, HP700/92, IBM 3270 & 5250  
terminal emulators  
Browser support via Microsoft® Internet Explorer  
Wireless software distribution and terminal configuration via Falcon Management Utility (FMU)  
TCP/IP Communications

### Development Environments

Many standard Windows CE development tools  
(Embedded Visual C++, Visual C#, Visual Basic,  
.NET, Personal Java 1.1)  
Java Virtual Machine (JVM)  
Falcon® CE Developers Toolkit  
Wavelink Studio and Avalanche

## Docking Station

Spare battery charging slot  
USB host and client interface  
Standard RS232 communication  
Ethernet module ready (optional)

## PSC Inc.

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## Specifications are subject to change without notice.

Additional information concerning this product or other PSC products and services can be found at the PSC website: [www.pscnet.com](http://www.pscnet.com), or contact your PSC representative for more information.



## PSC Worldwide Sales and Service locations

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