

# Falcon® 4410/4420

Portable Data Collection Terminals



Falcon 4420

Falcon 4410

The Falcon 4410 and 4420 package the power of the latest mobile computing technology in a rugged, yet ergonomic, portable data terminal for all of your demanding data collection needs. Whether in the harsh environment of a distribution center or in a fast-paced retail-in-store environment, the Falcon 4410/4420 has the feature set, accessories, and tools to meet your needs.

## Cutting Edge Mobile Technology

Inside the sleek Falcon 4410/4420 are cutting edge technologies from the leaders in mobile and wireless technology, such as Microsoft, Intel, Cisco, and others. The Falcon 4410/4420 features the Intel® XScale™ PXA250 processor and Microsoft™ Windows CE .Net, 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.

## Ergonomic Scanning

The Falcon 4410 is contoured to fit comfortably in an operator's hand for extended periods of fatigue-free data collection activities. The handled Falcon 4420 is ergonomically designed for scan-intensive applications. The Falcon 4410/4420 also has the widest range of scanning options in its class, including standard, long range, and advanced long range scanning options.

## Built for the Workplace

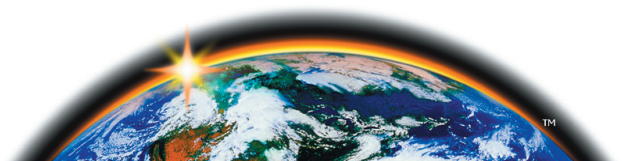
With a 4-foot drop specification and an IP54 environmental seal rating, the Falcon 4410/4420 is well suited to resist the rigors of your commercial or industrial environment. And for those loud industrial environments, the Falcon 4410/4420 features a powerful speaker with configurable volumes in excess of 90dB making sure it will always be heard.

### Ideal for:

- Retail In-Store
- Inventory control
- Warehouse/ DC Management
- Manufacturing Shop Floor

### Features:

- Intel® XScale™ PXA250
- Microsoft® Windows CE .Net
- Standard, Long Range, Advanced Long Range Integrated Laser Scanner Options
- Industry Leading Beeper Volume – exceeding 90dB
- **Wireless Options:** Supports leading wireless LANs, including Cisco Aironet, Lucent (Agere) Orinoco



# Specifications

Falcon® 4410/4420

These product 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 or contact your PSC representative for more information

## Mechanical

### Dimensions

Length: 8.9" / 22.6 cm  
 Width at display: 3.4" / 8.6 cm  
 Width at grip: 2.5" / 6.4 cm  
 Height at grip: 1.6" / 4.1 cm

### Weight (w/battery pack)

4410, Laser, no radio: 18.6 oz / 527 g  
 4410, Laser, radio: 19.6 oz / 556 g  
 4420, Laser, no radio: 20.4 oz / 578 g  
 4420, Laser, radio: 21.4 oz / 607 g

### Display

3.3" diagonal VGA display;  
 320 x 240 pixels;  
 16-Level grayscale

### Keypad

26-key standard alphanumeric - multi-click  
 alpha characters,  
 5 dedicated function keys, 5 shifted,  
 navigation rocker

### Construction

Industrial, high-strength polycarbonate/  
 ABS-blend plastic

## Environmental

### Temperature rating

Operating: -4° to 122° F / -20° to 50° C  
 Storage: -40° to 158° F / -40° to 70° C

### Humidity: 5 to 95% NC

**Shock:** multiple 4.0' / 1.2m drops to concrete  
**Water & Dust:** IEC529 rating IP54DW

## Optical

**Light source** – Visible Laser Diode (VLD): 650nm

**Scan rate:** ID: 35 ± 5 scans/sec.

**Depth of Field:** Refer to chart below

**Indicators:** Good read; scan

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

Label Density	Standard Range	Long Range	Advanced Long Range
5 mil	3.5" - 6.0" / 8.9 - 15.2 cm		
7.5 mil	2.5" - 10.0" / 6.4 - 25.4 cm		2.0" - 7.0" / 5.1 - 17.8 cm
10 mil	2.0" - 15.0" / 5.1 - 38.1 cm	11.0" - 24.0" / 27.9 - 61.0 cm	
100% UPC / 13 mil			19.0" - 39.0" / 48.3 - 99.1 cm
15 mil	2.0" - 20.0" / 5.1 - 50.8 cm	7.5" - 39.0" / 19.0 - 99.0 cm	20.0" - 50.0" / 50.8 - 127.0 cm
20 mil	* - 29.0" / * - 73.7 cm	7.5" - 48.0" / 19.0 - 121.9 cm	
30 mil			33.0" - 98.0" / 83.8 - 248.9 cm
40 mil	* - 40.0" / * - 101.6 cm	10.0" - 90.0" / 25.4 - 228.6 cm	
55 mil	* - 45.0" / * - 114.3 cm	10.0" - 120.0" / 25.4 - 304.8 cm	27.0" - 109.0" / 68.6 - 276.9 cm
70 mil (reflective)		48.0" - 200.0" / 121.9 - 508.0 cm	114.0" - 250.0" / 289.6 - 635.0 cm
100 mil (reflective)		60.0" - 240.0" / 152.4 - 609.6 cm	125.0" - 360.0" / 317.5 - 914.4 cm

## PSC Inc.

959 Terry Street  
 Eugene OR 97402-9150 USA  
 Tel: 800 695 5700 or 541 683 5700  
 Fax: 541 345 7140

## Ambient light immunity

### ID Standard

Artificial light: 450 ft-candles / 4,844 lux  
 Sunlight: 10,000 ft-candles / 107,640 lux

### ID Long Range/Advanced Long Range

Artificial light: 450 ft-candles / 4,844 lux  
 Sunlight: 8,000 ft-candles / 86,112 lux

## Decoding Capability (autodiscriminates between)

### ID Scan Engine

UPC A, E / EAN 8, 13  
 EAN 128  
 Code 128  
 Code 93  
 Interleaved 2 of 5  
 Standard 2 of 5  
 Code 39  
 Code 39 Full ASCII  
 Code 32  
 Codabar  
 MSI / Plessey

## Safety and Regulatory

**Electrical:** Complies to CE

**Emissions:** FCC Part 15 - Class A

**Laser classification:** CDRH Class II;

(CAUTION: Laser Radiation -  
 do not stare into beam);  
 IEC 60825 Class 2



## System

### Operating System

Windows CE .Net

### Microprocessor

Intel® XScale™ PXA250 applications processor,  
 400 MHz

### Memory

RAM: 64 MB;  
 Flash: 32 MB standard (64 MB optional)

### IR Communications Port

IrDA, ActiveSync

### Dock Communications

ActiveSync, up to 115 kbps

### PC Card

Internal PC Card Type I/II slot

### Beeper

Programmable for volume, duration and pitch;  
 max 90dB

### Power Options

Rechargeable Lithium Ion battery packs (2000 mAh)  
 Falcon® dock; Falcon® battery charger

### Advanced Power Management (without PC Card)

Sleep/off mode with programmable timeout: ~6 mA;  
 Idle mode: ~50 mA (min)  
 Operating mode: ~125 mA (min)  
 (option dependent, CPU speed and application)

Rechargeable lithium backup battery;

4 hour recharge time

Low battery indicator (display icon)

### Radio Support

Cisco Aironet 350 (802.11b)  
 Lucent (Agere) Orinoco 802.11b

### System Support

VT100/220, HP700/92, IBM 3270 & 5250  
 via PowerNet Twin client

Simple VT100/220 support via Included

Terminal Emulator

Browser support via Microsoft® Pocket Explorer

Wireless software distribution via Falcon

Management Utility

TCP/IP Communications

### Development Environments

Many standard Windows CE development tools  
 (Embedded Visual C++, Visual C#, Visual Basic, .Net,  
 Personal Java 1.1)

Insignia Jeode Java Virtual Machine (JVM)

Falcon® CE Developers Toolkit

RF SDK; RFBuilder

Wavelink Studio



Switzerland • OPAL Associates AG • Motorenstrasse 116 • CH-8620 Wetzikon • Telefon +41 (0)1 931 12 22 • Telefax +41 (0)1 931 12 20 •  
 Email info@opal.ch • OPAL Associates SA • Avenue des Boveresses 54 • Case postale 29 • CH 1000 Lausanne 21 • Telefon +41 (0)21 653 95 00 •  
 Telefax +41 (0)21 653 95 02 • Email info@opalsa.ch • Germany • OPAL Associates GmbH • Lohnerhofstrasse 2 • D-78467 Konstanz  
 Telefon +49 (0)7531 813 000 • Telefax +49 (0)7531 813 00 99 • Email info@opalgmbh.de • OPAL Associates GmbH • Osterholder Allee 2 •  
 25421 Pinneberg • Telefon +49 (0)4101 787 615 • Telefax +49(0)4101 787 616 • Email hamburg@opalgmbh.de • Austria • OPAL Associates  
 GesmbH • Vorarlberger Wirtschaftspark • A-6840 Götzis • Telefon +43 (0) 5523 58833 • Telefax +43 (0)5523 521569 • Email info@opalgmbh.at