

Falcon® 4400 Series

Windows® Based Mobile Computer

Data Sheet



Features

- Industry leading ergonomics combine superb balance, light weight and arched grip for ease of use
- Flexible configurations provide choice of two operating systems, six bar code scan engines and seven keypads
- Rugged construction survives industrial environments and multiple drops to concrete

Accessories

- Powered Vehicle Dock
- Single-Slot Dock and Four-Slot Dock
- Four-Slot Battery Charger
- Handle/Handstrap Conversion Kit
- Holsters/Softcases
- USB Data Cable
- Serial Charging Cable
- Serial Printer Adapter



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



The Falcon 4400 Series has tested compatible with Cisco's wireless solution. The Cisco Compatible logo signifies that PSC's product has undergone interoperability testing by PSC together with Cisco and a third-party test house based on testing criteria set by Cisco. PSC is solely responsible for the support and warranty of its product. Cisco makes no warranties, express or implied, with respect to PSC's product or its inter-operation with the listed Cisco products and disclaims any implied warranties of merchantability, fitness for a particular use or against infringement.



Copyright © PSC Inc. 2004-2006. 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 PSC. • PSC Inc. of Eugene, Oregon, USA is ISO registered by NQA. • Falcon and the PSC logo are registered trademarks of PSC Inc. • All other brand and product names are trademarks of their respective owners. • Additional information concerning this product or other PSC products and services can be found at the PSC web site: www.psc.com • Product specifications are subject to change without notice.

Mechanical

Dimensions

Length: 22.6 cm / 9.0" Width at display: 8.6 cm / 3.5"
Width at grip: 6.4 cm / 2.5" Height at grip: 4.1 cm / 1.6"

Weight: 724 g / 23.3 oz (Will vary depending upon the configuration selected. Falcon 4400 model shown with radio, scanner, and battery pack.)

Display: 3.5" active matrix TFT QVGA display; 320 x 240, pixels; 64K colors, up to 400 NIT, anti-reflective

Indicators: Good read LED; scan LED

Keypads: 26-key Standard Alphanumeric; 48-key (handled version only) full alphanumeric and 5250 support; 52-key full alphanumeric and 5250 support; 52 key numbers up and 5250

Construction: Industrial, polycarbonate/ABS-blend plastic shell with thermoplastic urethane overmold

Environmental

Temperature Rating

Operating: -10° to 50° C / 14° to 122° F
Storage: -25° to 70° C / -13° to 158° F

Humidity: 5 to 95% NC

Shock: Up to multiple 15 M / 5.0' drops to concrete

Water & Dust: CIE IEC 60529, Rating IP54

Optical	Laser Scan Engine		Linear Imager
	SR*	LR*/ALR*	
Light Source	650 nm	650 nm	645 nm
Scan Rate	35 ± 5 scans/sec.	35 ± 5 scans/sec.	36 ± 5 scans/sec.
Ambient Light Immunity			
Artificial Light	4,844 Lux	4,844 Lux	100,000 Lux
Sunlight	86,112 Lux	86,112 Lux	100,000 Lux

* Key: SR = Standard Range, LR = Long Range, ALR = Advanced Long Range.

DEPTH OF FIELD TABLE Typical Range Comparisons						
Label Density	Standard Range	Long Range	Advanced Long Range	Linear Imager	2D SR Imager	2D HD Imager
5 mil	8-13 cm / 3.5"	—	—	8-13 cm / 3.0-5.0"	—	—
6.6 mil PDF-417	—	—	—	—	11-16 cm / 4.0-6.5"	4-13 cm / 1.8 - 5.0"
7.5 mil	6-23 cm / 2.5-9"	—	—	—	—	4-13 cm / 1.5-5.0"
8 mil	—	—	—	—	8-20 cm / 3.3-8.0"	—
10 mil	6-33 cm / 2.5-13"	37-42 cm / 14.5-16.5"	—	4-23 cm / 1.5-9"	8-23 cm / 3.2-9.2"	3-17 cm / 1.2-6.6"
8.3 mil Data Matrix	—	—	—	—	—	6-12 cm / 2.4-4.7"
8.3 mil QR Code	—	—	—	—	—	6-11 cm / 2.4-4.4"
13 mil / 100% UPC	—	—	23-56 cm / 9-22"	4-27 cm / 1.5-10.5"	6-32 cm / 2.5-12.5"	3-20 cm / 1.0-7.9"
15 mil	6-48 cm / 2.5-19"	23-84 cm / 9-33"	51-127 cm / 20-50"	—	5-33 cm / 2-12.8"	—
15 mil Data Matrix	—	—	—	—	—	9-17 cm / 3.7-6.5"
20 mil	6-53 cm / 2.5-21"	20-101 cm / 8-40"	—	4-30 cm / 1.5-12"	—	—
30 mil	—	—	84-226 cm / 33-89"	—	—	—
35 mil MaxCode	—	—	—	—	5-33 cm / 2.0-13.0"	—
40 mil	* 6-76 cm / 2.5-30"	33-211 cm / 13-83"	—	4-43 cm / 1.5-17"	—	—
55 mil	* 6-91 cm / 2.5-36"	48-236 cm / 19-93"	97-305 cm / 38-120"	—	—	—
70 mil (reflective)	—	119-576 cm / 43-148"	215-660 cm / 85-260"	—	—	—
100 mil (reflective)	—	127-533 cm / 50-210"	241-815 cm / 125-320"	—	—	—

*Minimum distance determined by symbol length and scan angle. Dependent upon printing resolution, contrast, and ambient light.

System

Operating System: Windows® CE v5.0, Windows Mobile® v5.0

Microprocessor: Intel® XScale™ PXA255, 400 MHz

Memory:

64 MB RAM / 64 MB FLASH
128 MB RAM / 128 MB FLASH

Dock Communications: USB 1.1 (ActiveSync) & RS-232 (ActiveSync and other RS-232 protocols)

PC Card: Internal card slot

Beep Tone: 86dB(A at 61 cm / 24") / 100dB(A at 10 cm) (typical) Programmable for pitch and duration

Power Options

Rechargeable Lithium Ion Battery Pack

Falcon Single and Four-Slot Dock with power supply
Advanced Power Management (without PC Card & backlight):

Sleep/off mode with programmable timeout: 5 mA; Idle mode: 60 mA (typical); Operating mode: 155 mA (typical). Rechargeable lithium backup battery; Low battery indicator (display icon)

Radio Support

WLAN: IEEE 802.11 b/g

WLAN Security: Cisco CCX; Windows Zero Configuration

Bluetooth® wireless technology: Class 2 Version 1.2

System Support: VT100/220, HP700/92, IBM 3270/5250 terminal emulators; Browser support via Microsoft® Internet Explorer; TCP/IP Communications

Management Tools: Falcon® Desktop Utility (FDU) for security & configuration; Falcon Management Utility (FMU) or Wavelink® Avalanche for remote device management & software distribution.

Development Environments:

Embedded Visual C++, Visual C# .NET, Visual Basic .NET, Personal Java 1.1, Java Virtual Machine (JVM), Falcon® CE Developers Toolkit, Wavelink® Studio, Visual Studio 2005, and Wavelink® Studio.

Decoding Capability (auto-discrimination)†

1D Codes

- Code 32, 39, 93
- EAN/JAN 8, 13
- Matrix 2/5
- EAN/UPC 2 digit ext.
- Codabar
- EAN 128
- MSI / Plessey
- EAN/UPC 5 digit ext.
- Code 128
- UPC A, E
- Standard 2/5
- EAN/UCC Composite
- Code 128 ext.
- Interleaved 2/5
- Code 39 Full ASCII
- RSS-14/RSS Limited

2D Codes

- PDF-417
- RSS Expanded
- Data Matrix
- QR Code
- Micro PDF-417
- Aztec Code
- Maxi Code
- OCR-A/B
- US. Currency Serial Number
- MICR E 13 B
- Postal Codes

† Please refer to the appropriate Product Reference Guide (PRG) for specific symbology support for the laser scan engine or imaging scan engine options.

Safety and Regulatory

Electrical: EN60950, UL60950, CSA60950

Battery: IATA/UN

Emissions: FCC Part 15C, EN55022, VCCI, ICES-003, CNS 13438, AS/NZS 3548

Radio: FCC Part 15.247, EN 300 328

Laser Classification: CDRH Class II;

⚠ (CAUTION: Laser Radiation—do not stare into beam); IEC 60825-1, Class 2; Class 3R for ALR devices

Restriction of Hazardous Substances: RoHS version available



PSC Inc.

959 Terry Street
Eugene, OR 97402-9150 USA
Tel: 800 695 5700 / 541 683 5700
Fax: 541 345 7140
www.psc.com

PSC Barcode Limited (UK Office)

Axis 3, Rhodes Way
Watford, England, WD24 4TR7
Tel: 44 0 1923 809500
Fax: 44 0 1923 809505

