

Falcon® 4400 Series

Windows® CE.NET Color Mobile Computer

Data Sheet



Features

- Overmold for 5 ft. /15 M drop to concrete
- Optional array imager for 2D bar code applications
- Tethered Stylus for enhanced stylus security
- Optional serial printer connector for printing applications
- Keypad options include 26-, 48-, and 52- key versions
- Ergonomic Design
- Intel® XScale™ PXA255 400MHz
- Windows CE .NET Operating System
- Bright 64K Color TFT Active Matrix QVGA display
- Standard, Long Range, Advanced Long Range Integrated Laser Scanner, or Linear Imager Options
- Industry Leading Beeper Volume
- Instant-On Trigger (Falcon 4420 Only)
- Open Architecture—PC Card Slot for RF, Memory, etc.
- Supports Cisco Aironet (802.11b)

Accessories

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

Mechanical

Dimensions

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

Weight: 23.3 oz / 724 g (Will vary depending upon the configuration selected. Falcon 4423 model shown with radio, scanner, and battery pack)

Display: 3.5" active matrix TFT QVGA display, 320 x 240, pixels, 64K colors

Indicators: Good read LED; scan LED

Keypads: 26-Key Standard Alphanumeric, 48-Key Full Alphanumeric (handled version only), 52-Key Full Alphanumeric, and 5250 support

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

Environmental

Temperature Rating

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

Humidity: 5 to 95% NC

Shock: Multiple 50' / 15 M drops to concrete

Water & Dust: IEC52 Rating IP54DW

Optical	Laser Scan Engine		Linear Imager	2D Imager
	SR*	LR*/XLR*		
Light Source	650 nm	650 nm	645nm	626 nm
Scan Rate	35 ± 5 scans/sec.	35 ± 5 scans/sec.	36 ± 5 scans/sec.	N/A
Ambient Light Immunity				
Artificial Light	450 ft. candles/ 4,844 Lux	450 ft. candles/ 4,844 Lux	9,290 ft. candles/ 100,000 Lux	N/A
Sunlight	8,000 ft. candles/ 86,112 Lux	8,000 ft. candles/ 86,112 Lux	9,290 ft. candles/ 100,000 Lux	9,290 ft. candles/ 100,000 Lux

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

DEPTH OF FIELD TABLE Typical Range Comparisons					
Label Density	Standard Range	Long Range	Advanced Long Range	Linear Imager	2D Imager
5 mil	3-5' / 8-13 cm	—	—	3-50' / 8-13 cm	—
6.6 mil PDF-417	—	—	—	—	40-65' / 11-16 cm
75 mil	2-59' / 6-23 cm	—	—	—	—
8 mil	—	—	—	—	33-8' / 8-20 cm
10 mil	2-513' / 6-33 cm	9-22' / 23-56 cm	—	15-9' / 4-23 cm	32-92' / 8-23 cm
100% +/13 mil	—	—	19-29' / 48,3-991 cm	15-105' / 4-27 cm	25-125' / 6-32 cm
15 mil	2-519' / 6-48 cm	7-38' / 18-96 cm	20-50' / 51-127 cm	—	21-128' / 5-33 cm
15 mil Data Matrix	—	—	—	—	37-65' / 9-17 cm
20 mil	**21' / 6-53 cm	7-45' / 18-114 cm	—	15-12' / 4-30 cm	—
30 mil	—	—	33-98' / 84-249 cm	—	—
35 mil MaxiCode	—	—	—	—	213' / 5-33 cm
40 mil	**30' / 6-76 cm	10-90' / 25-229 cm	—	15-17' / 4-43 cm	—
55 mil	**36' / 6-91 cm	10-100' / 25-250 cm	27-109' / 69-277 cm	—	—
70 mil (reflective)	—	62-240' / 152-457 cm	114-250' / 290-635 cm	—	—
100 mil (reflective)	—	60-240' / 157-610 cm	125-360' / 318-914 cm	—	—

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

System

Operating System: Windows® CE.NET

Microprocessor: Intel® XScale™ PXA255, 400 MHz

Memory: RAM: 64 MB; Flash: 64 MB

Communications Port: USB 11 (ActiveSync) & RS232 (ActiveSync and other RS232 protocols)

Dock Communications: USB 11 (ActiveSync) & RS232 (ActiveSync and other RS232 protocols)

PC Card: Internal PC Card Type III slot

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

Power Options

Rechargeable Lithium Ion battery pack (2000 mAh)

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: Cisco Aironet (802.11b), Symbol Wireless Networker (802.11b)

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: Windows CE development tools, Embedded Visual C++, Visual C# .NET, Visual Basic .NET, Personal Java 11, Java Virtual Machine (JVM), Falcon® CE Developers Toolkit, and Wavelink® Studio.

Decoding Capability (autodiscrimination)†

- ID 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
 - U.S. 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/IUN

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



Hong Kong
 Tel: 852-23702227
 Fax: 852-23702054
 sales@sysscan.com.hk

China & Hong Kong
Guangzhou
 Tel: 86-20-87591553
 Fax: 86-20-87598472
 gz_sales@sysscan.com.hk

Shanghai
 Tel: 86-21-62825319
 Fax: 86-21-62825283
 sh_sales@sysscan.com.hk

www.sysscan.com.hk or www.sysscan.com.cn



訊天物流有限公司

