

# Falcon® 340 & 345

Portable Data Collection Terminals



## Solving Data Collection Needs

The Falcon® 340 & 345 are the most feature-rich members of the growing family of Falcon® Industrial handheld data collection terminals from PSC. They were designed for easy integration in the supply chain of companies involved in logistics, manufacturing, warehousing and distribution, and in-store retail.

## A Favorite Among Users

These sleek portable terminals were ergonomically designed with the end-user in mind. They are the lightest weight unit in their class, only 16.3 oz. / 465 g. Engineered to reduce fatigue, this weight is ideally balanced over the hand using a removeable form-fit rubber-grip handle. Combine this with an integrated scan trigger, a large 16-line back-lit display and a three keypad options and the user enjoys hours of high performance data collection.

## No Lack of Performance Here

At the heart of the Falcon® 340 & 345 portable data terminals is a powerful 32 bit 486 class processor, running at 33MHz, with 8MB of RAM and 2MB of Flash ROM. This flexible architecture also supports an internal PCMCIA Type II PC card for additional memory or wireless LAN connectivity. Because the Falcon® 340 & 345 use a standard operating system, DOS 6.22, you can run applications previously developed for other Falcon® terminals and other DOS terminals. Thin client systems can be instantly integrated with terminal emulation and text browser support. You can also use popular PC-based development tools like PSC's Universal Program Generator (UPG) or RF SDK to create custom applications for your data collection needs.

## Batch and Wireless Models

The Falcon® 340 with the 486 processor and 8MB of RAM is one of the most powerful batch terminals on the market today. Fast lookup and validation of your data is critical to productivity.

The Falcon® 345 sets the standard for flexibility when it comes to wireless communications, providing connectivity for data collection applications where real-time information is critical. The Falcon® 345 can be configured with any of the leading 2.4GHz spread spectrum wireless LAN solutions including Cisco Aironet, Lucent (Agere) Orinoco, Proxim, and Symbol.

Additional flexibility comes when you can have a wireless connection of the Falcon® 345 terminals into your existing legacy system. With our PowerNet Twin Client product these new Falcon® terminals can support VT100, VT220, HP700/92, IBM 3270 and IBM 5250 terminal emulation, with screen formatter capabilities.

### Ideal for:

- Retail In-Store
- Inventory control
- Warehouse Management
- Outdoor Data collection

### Features:

- Standard, Long Range and Advanced Long Range integrated laser scanner options
- Removable handle with trigger
- Batch or Real-time Data Collection
- Powerful 486 Class Processor
- DOS 6.22 Operating System
- Three keypad options
- Supports leading wireless LANs including Cisco Aironet, Lucent (Agere) Orinoco, Proxim, Symbol



# Specifications

Falcon® 340 & 345

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: 7.8" / 19.8 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)

No radio, w/laser: 16.3 oz / 465 g  
 Radio, w/laser: 17.3 oz / 490 g

### Display

Super-twist graphics LCD;  
 Backlight w/programmable timeout;  
 128x160 pixels, plus 8 on-screen icons;  
 Formats: 16x26, 16x20 & 8 lines x 20 characters  
 International support for Japanese and Chinese

### Keypad

38-key standard alphanumeric –  
 Single and double-click alpha,  
 5 dedicated function keys, 5 shifted,  
 Western-European character support  
 48-key full alphanumeric –  
 Single stroke access to full alphabet,  
 Function key support via function & numbers  
 25-key large numeric –  
 Alpha accessed via function key,  
 5 dedicated function keys, 5 shifted

### Construction

Industrial, high-strength polycarbonate/  
 ABS-blend plastic

## Environmental

### Temperature rating

Operating: 14° to 122° F / -10° to 50° C  
 Storage: -4° to 158° F / -20° to 70° C

### Humidity: 5 to 95% NC

Shock: multiple 4.0' / 1.2m drops to concrete

## Optical

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

Scan rate: 35 scans/sec. nominal

Depth of Field: Refer to chart on this page

Indicators: Good read; scan

### Ambient light immunity

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

## Decoding Capability (autodiscriminates between)

UPC A, E / EAN 8,13 / JAN 8,13  
 (P2 / P5, Code 128 EAN add-ons)  
 Code 128 Interleaved 2 of 5  
 Code 39 Standard 2 of 5  
 Code 39 Full ASCII Matrix 2 of 5  
 Code 93 MSI / Plessey  
 Code 11 Ames  
 Codabar Label Codes 4/5  
 ISBN conversion

## 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



Depth-of-Field Chart (printing resolution, contrast and ambient light dependent; *Minimum distance determined by symbol length and scan angle)			
Label Density	Typical Standard Range	Typical Long Range	Typical Advanced Long Range
5 mil	3.0" – 5.0" / 8.0" – 13.0 cm		
7.5 mil	2.5" – 9.0" / 6.0 – 23.0 cm		
10 mil	2.5 – 13.0" / 6.0 – 33.0 cm	9.0" – 22.0" / 23.0 – 56.0 cm	
13 mil			19.0" – 29.0" / 48.0 – 74.0 cm
15 mil	2.5" – 19.0" / 6.0 – 48.0 cm	7.0" – 38.0" / 18.0 – 96.0 cm	20.0" – 50.0" / 51.0 – 127.0 cm
20 mil	*2.5" – 21.0" / 6.0 – 53.0 cm	7.0" – 45.0" / 18.0 – 114.0 cm	
30 mil			33.0" – 98.0" / 84.0 – 249.0 cm
40 mil	*2.5" – 30.0" / 6.0 – 76.0 cm	10.0" – 90.0" / 25.0 – 229.0 cm	
55 mil	*2.5" – 36.0" / 6.0 – 91.0 cm	10.0" – 100.0" / 25.0 – 250.0 cm	27.0" – 115.0" / 69.0 – 292.0 cm
70 mil	(Reflective)	60.0" – 180.0" / 152.0 – 457.0 cm	114.0" – 250.0" / 290.0 – 635.0 cm
100 mil	(Reflective)	62.0" – 240.0" / 157.0 – 610.0 cm	125.0" – 360.0" / 318.0 – 914.0 cm

Falcon® Dock  
 also available

Falcon® IR to RS232 Adapter  
 also available

## System

### Operating System

ROM-DOS 6.22

### Microprocessor

486 low power, 32-bit microprocessor; programmable speeds up to 33 MHz; Real-time clock

### Memory

Flash: 2MB (DOS, BIOS, applications and data storage);  
 RAM: 8MB (for system operation, virtual-disk data storage)

### IR Communications Port

Communication with Falcon® IR dock; Supports IR portable printer; IrDA compatible

### Dock Communications

RS232; X modem; Z modem; 16550 UART,  
 up to 57,600 bps

### PC Card

Internal PC Card Type I/II slot

### Speaker

Programmable for volume, duration and pitch

### Power Options

Rechargeable NiCd & NiMH battery pack;  
 Falcon® dock; Falcon® battery charger

### Advanced Power Management (without PC Card)

Sleep/off mode with programmable timeout: ~2 mA;  
 Doze mode: ~50 mA

Operating mode: ~80 mA

(option dependent, CPU speed and application)

Rechargeable lithium backup battery

Low battery indicator (display icon)

### System Support

VT100/220, HP700/92, IBM 3270 & 5250

emulation via PowerNet Twin client

Simple VT100/220 support via VT-Lite

Browser support via Falcon® Lynx

Wireless software distribution via FAST Update

TCP/IP Communications

### Development Environments

Many standard DOS development tools; Falcon®

Developer's Toolkit; UPG; RF SDK; RFBUILDER

### Radio Support (Falcon® 345 w/Internal Antenna)

Cisco Aironet 350 Series

Lucent (Agere) Orinoco

Proxim Range LAN2

Symbol Spectrum24®

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