Falcon® 310 & 315

Portable Data Terminals

Entry Level Solutions for Portable Data Collection

The Falcon® 310/315 portable data terminals are an excellent choice for fast and accurate data collection applications. Durable, ergonomically designed and flexible, these units have many features you would expect to find in a more expensive product.
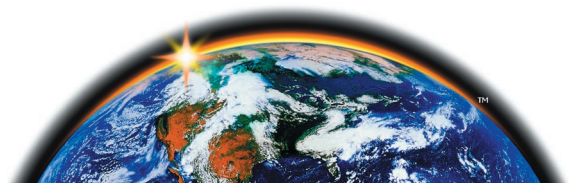
Featuring open architecture for ease of application development, the Falcon® 310/315 line runs DOS 6.22 on a powerful 32 bit, 386-based platform. Both units include an 8x21 backlit graphics display, a 41-key keypad, an RS-232 serial port, 2MB of RAM, 2MB of flash memory and a choice of standard-range or long-range integrated laser scanners. The Falcon® 310 has a user-accessible PC Card slot for extra memory, network connectivity or a fax/modem card.

While the Falcon® 310 provides batch data collection solutions, the Falcon® 315 offers a choice of 2.4 GHz spread spectrum radio solutions, providing long range mobility, high throughput, advanced power management and seamless roaming among multiple cells. The Falcon 315 also offers extensive network connectivity protocols, allowing you to easily integrate this comprehensive RF data collection solution into your existing operation.

The Falcon® 310/315 line includes a set of powerful software tools that make it easy to create data collection and management applications to fit your needs. Uses include inventory control, shipping and receiving, factory floor data collection and warehousing, in a variety of industries including health care, retail, manufacturing and transportation. An exceptional value, the Falcon® 310/315 line brings cost-effective efficiency to your operation.

Choose From a Variety of Accessories for the Falcon 310 & 315:

- Single or 4-slot Docks
- Single or 4-slot Chargers
- Softcase, Holster
- Falcon-to-Host Serial Cable
- Dock-to-Host Serial Cable
- Nicad Battery Pack
- NiMH Battery Pack
- ATA Flash Cards (8, 16, and 32 MB versions)
- 56K Modem

Features:

- Lightweight, ergonomic, compact design
- Open architecture design
- DOS 6.22, 386 PC-compatible
- User-accessible PC Card slot
- Integrated laser options
- 8 x 21 graphics backlit LCD
- Wireless options:
    - Choice of 2.4 GHz spread spectrum radios
    - Long range mobility
    - High throughput network capacity
    - Advanced power management
    - Seamless roaming
    - Access points, antennas and cables
    - Network and Terminal emulation software

Specifications
Falcon® *310 & 315*

PRODUCT and SYSTEM

Mechanical

Dimensions
Length no laser: 8.25" / 21.0 cm
Length w/laser: 9.35" / 23.8 cm
Top width: 3.50" / 8.9 cm
Grip width: 2.75" / 7.0 cm
Height: 1.45" / 3.7 cm

Weight (w/battery pack)
No radio, no laser: 14.3 oz. / 404 g
No radio, w/laser: 16.7 oz. / 472 g
Radio, no laser: 16.2 oz. / 459 g
Radio, w/laser: 18.6 oz. / 527 g

Display
Super-twist graphics LCD;
Backlight w/programmable timeout;
128x64 pixels;
Up to 8 lines x 21 characters

Keypad
41 large alphanumeric keys;
10 function keys;
Direct Western-European character support;
2 programmable side triggers

Construction
Industrial, high-strength polycarbonate/
ABS-blend plastic
Chemical and splash resistant

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 Diodes (VLD)
Standard Range: 650nm
Long Range: 650 nm
Scan angle – nominal
Standard Range: 42°
Long Range: 23°
Scan rate: 35 scans/sec.
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

CE

System

Operating System
ROM-DOS 6.22

Microprocessor
AMD ELAN™ SC300 Low Power, 32-bit microprocessor with system logic; programmable speeds from 1 to 25 MHz; Real-time clock and calendar

Memory
Flash: 1MB (2MB in RF) (DOS, BIOS, applications and data storage); Expandable up to 32MB with PC Card [Falcon® 310 ONLY];
RAM: 2MB (for system operation, virtual-disk data storage)

Serial Communications
RS232; RJ45 10-pin connector (COM1 serial port and docking); PC Card Type I/II socket (COM2 with modem card) [Falcon® 310 ONLY]; X modem, PSC ACK/NAK protocols provided; DOS UART Access support up to 115 kbps

PC Card
User-accessible PC Card Type I/II slot (supports ATA Flash Cards, modem cards and network cards) [Falcon® 310 ONLY]; (or certified radio cards) [Falcon® 315 ONLY]

Speaker
Software programmable for volume, duration and pitch

Power Options
3 AA alkaline bateries (supplied); Rechargeable Nicad battery pack; Rechargeable NiMH battery pack; Falcon dock; Falcon battery charger

Advanced Power Management (without PC Card)
Sleep/off mode with programmable timeout: ~1 mA; Doze mode: ~50 mA; Operating mode: >80 mA (option dependent, CPU speed and application); Rechargeable lithium backup battery; Low battery indicator; Programmable automatic shutdown

Software Tools
Windows-based configuration and installation programs; Falcon® Developer's ToolKit (includes Run-time libraries and technical reference manual); Applications can be written using any x86 supported compiler (C, Basic, etc.); PowerNet Twin Client terminal emulation for VT 100/220, 5250, 3270, HP700/92 Windows-based universal Program Generator (UPG); Falcon® Portable Application Library (PAL); IntelliTrack® data management applications [Falcon® 310 ONLY] Advanced version with screen fromatting; IntelliTrack® WMS inventory management software client [Falcon® 315 ONLY]

Input Devices
Handheld 5V lasers and CCDs; Wands; I.D. badge scanners

Antenna (Falcon® 315)
Integrated, dipole

Radio Support (Falcon® 315)
Cisco (Aironet); Lucent 802.11b; Proxim Range LAN2; Symbol Spectrum 24®

Depth-of-Field Chart – (printing resolution, contrast and ambient light dependent; *Minimum distance determined by symbol length and scan angle)

Label Density	Standard Range (25% min. contrast; 5 mil min. resolution) Range	Long Range (40% min. contrast; 10 mil min. resolution) Range
5 mil	3.0" to 5.0" (8.0 to 13.0 cm)	
7.5 mil	2.5" to 9.0" (6.0 to 23.0 cm)	
10 mil	2.5" to 13.0" (6.0 to 33.0 cm)	9.0" to 22.0" (23.0 to 56.0 cm)
15 mil	2.5" to 19.0" (6.0 to 48.0 cm)	7.0" to 38.0" (18.0 to 96.0 cm)
20 mil	*2.5" to 21.0" (6.0 to 53.0 cm)	7.0" to 45.0" (18.0 to 114.0 cm)
40 mil	*2.5" to 30.0" (6.0 to 76.0 cm)	10.0" to 90.0" (25.0 to 229.0 cm)
55 mil	*2.5" to 36.0" (6.0 to 91.0 cm)	10.0" to 100.0" (25.0 to 250.0 cm)
70 mil	(reflective)	60.0" to 180.0" (152.0 to 457.0 cm)
100 mil	(reflective)	62.0" to 240.0" (157.0 to 610.0 cm)

Falcon® Dock also available

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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***; or contact your PSC representative for more information.