Falcon™ 310 & 315 Portable Data Terminals

Entry Level Solutions for Portable Data Collection

- **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

Falcon 310

Falcon 315

Falcon Dock

Falcon 310/315: Portable Data Collection Terminals

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.

Falcon Accessories

- Single or 4-slot Docks
- Single or 4-slot Chargers
- Softcase, Holster
- Falcon-to-Host serial cable
- Dock-to-Host serial cable
- ATA Flash Cards (8, 16, and 32MB versions)
- Nicad battery pack
- NiMH battery pack

PSC

EXPANDING TECHNOLOGY. FOCUSING SOLUTIONS.

Falcon™ 310 & 315 Portable Data Terminals

SPECIFICATIONS

MECHANICAL

Dimensions

- **Length**   without laser: 8.25" (21.0 cm)
     with 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-ft. drops to concrete

SAFETY / 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

OPTICAL

Light source   Standard Range: 670nm; Long Range: 650 nm Visible Laser Diodes (VLD)

Scan angle   Standard Range: 42° nominal; Long Range: 23° nominal

Scan rate   36 ±4 scans/sec.

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

Standard Range (25% min. contrast; 5 mil min. resolution)

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)
15 mil	2.5	to	19.0"	(6.0 to 48.0 cm)
*20 mil	2.5	to	21.0"	(6.0 to 53.0 cm)
*40 mil	2.5	to	30.0"	(6.0 to 76.0 cm)
*55 mil	2.5	to	36.0"	(6.0 to 91.0 cm)

Long Range (40% min. contrast; 10 mil min. resolution)

10 mil	9	to	22"	(23 to 56 cm)
15 mil	7	to	38"	(18 to 96 cm)
20 mil	7	to	45"	(18 to 114 cm)
40 mil	10	to	90"	(25 to 229 cm)
55 mil	10	to	100"	(25 to 250 cm)
(reflective) 70 mil	60	to	180"	(152 to 457 cm)
(reflective) 100 mil	62	to	240"	(157 to 610 cm)

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
- Code 39
- Code 39 Full ASCII
- Code 93
- Code 11
- Ames
- ISBN conversion
- MSI / Plessey
- Interleaved 2 of 5
- Standard 2 of 5
- Matrix 2 of 5
- Codabar
- Label Codes 4/5

CE

SYSTEM

- **Operating System**
  ROM-DOS 6.22

- **Microprocessor**
  AMD ELAN™ Am486® 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 or 4MB (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 fax/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, fax/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 time-out: ~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 TN 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 RF 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)
  Proxim Range LAN2; Symbol Spectrum 24; Lucent; Aironet

Specifications are subject to change without notice.
For further information, contact your PSC representative.

For product information, technical support, answers to frequently asked questions, product documentation, software updates, repair information, and how to contact PSC, visit the PSC Website at: **www.pscnet.com**

PSC
EXPANDING TECHNOLOGY. FOCUSING SOLUTIONS.