

# Dolphin® 9500 Series

## Mobile Computers



### Overview

Dolphin 9500 Series mobile computers deliver unparalleled performance and value for all mobile data collection applications. Their lightweight, ergonomic, and rugged designs provide the ease of use and operational reliability needed to excel in robust mobile applications such as package delivery, field service, route accounting, transportation, warehousing, retail, and industrial/manufacturing.

For maximum speed, efficiency, and usability, the Dolphin 9500 Series comes equipped with the Intel X-Scale processor and Windows Mobile software. The high-performance system architecture is powered by high-capacity, hot-swappable lithium-ion battery packs, enabling Dolphin 9500 Series terminals to operate longer in wireless, scan-intensive environments.

Designed to provide seamless data and voice connectivity for you and your mobile workers, the Dolphin 9500 terminal features an integrated triple-radio design for wireless WAN, LAN, and PAN communications. This state-of-the-art feature provides real-time information access anytime, anywhere, while communicating to any compatible wireless device, improving operational efficiency while ensuring data accuracy and security.

Integrated Adaptus Imaging Technology 5.0 provides workers with the data capture tools they need to get the job done quickly and efficiently, whether it is scanning a package for delivery, performing an inventory cycle count, capturing a signature for proof of receipt, or taking a picture of damaged goods. The Dolphin 9500 Series performs these tasks and more, extending the capabilities of your mobile applications and workforce.

### Premium Features

- **Microsoft® Windows Mobile® 5.0:** Offers a user-friendly, industry standard platform for both developers and users.
- **Rugged, IP64 Sealed Construction:** Operates in harsh environments, withstands rough treatment, and protects stored data.
- **Intel® X-Scale™ Processor:** Provides faster processing of data collection applications, and image processing.
- **Ergonomic Designs:** Facilitates comfortable, single-handed data collection for extended periods of use.
- **Adaptus Imaging Technology 5.0:** Provides instant point-and-shoot bar code scanning (1D and 2D), signature and digital image capture.
- **Triple Wireless Radio Design (9500):** Integrated WAN, LAN, and PAN for real-time data collection and access to information anytime, anywhere.
- **Lithium Ion Battery:** 7.4 volt, 14.8 watt-hour ensures longer operation time with wireless communications and scan-intensive applications.
- **1/4 VGA Color Display With Industrial Touch Screen:** Offers enhanced data viewing and application interface.
- **Secure Digital (SD) User Accessible Memory Interface:** Provides the option of installing additional memory for application data storage.
- **Three Intuitive Keyboard Layouts:** Customize your data entry for your mobile application solution.

# Dolphin® 9500 Series Specifications



## System Architecture

<b>Processor:</b>	Intel X-Scale PXA255 400MHz
<b>Development Environment:</b>	Hand Held Products Dolphin SDK for Visual Studio 2005 supports C/C++, C#, and Visual Basic development on Visual Studio 2005
<b>Operating Platform:</b>	Microsoft Windows Mobile 5.0 Professional Edition Microsoft Windows Mobile 2003 Second Edition (optional)
<b>Third-Party Software:</b>	SOTI MobiControl (remote device management), PowerNet™ Terminal Emulation (TNVT, 3270, 5250), and ITScriptNet™
<b>Memory:</b>	64MB RAM x 64MB non-volatile Flash

## Data Inputs

<b>Imager/Scanner:</b>	5100 Standard Range (SR) with green aimer, decodes from 1.9 to 13.1 in. (4.8 to 33.3 cm.) 5100 Smart Focus (SF) with green aimer, decodes from 1.7 to 8.8 in. (4.3 to 22.3 cm.) 5300 Standard Range (SR) with High-Vis laser aimer, decodes from 1.9 to 13.1 in. (4.8 to 33.3 cm.) (Specifications are for 100% UPC Code.) Caution - use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.	<small>LASER LIGHT. DO NOT STARE INTO BEAM CLASS 2 LASER PRODUCT 1.0 mW MAX OUTPUT: 650nm IEC60825-1: 1993+A1+A2 Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.</small>
<b>Laser Scanner (9501/9551):</b>	HP non-decoded reads 5 mil bar codes from 2.75 to 7 in (.07 to .17 m); 55 mil reflective bar codes from 5 to 50 in (.13 to 1.27 m.) LR non-decoded reads 10 mil bar codes from 10 to 24 in (.25 to .6 m); 100 mil reflective bar codes from 66 to 232 in (1.67 to 5.9 m.) ALR non-decoded reads 13 mil bar codes from 18 to 39 in (.45 to 1 m); 100 mil reflective bar codes from 102 to 363 in (2.6 to 9.2m.)	
<b>1D Symbolologies Read:</b>	Codabar, Code 3 of 9, Code 11, Code 32 Pharmaceutical (PARAF), Code 93, Code 128, EAN with Add-On and EAN with Extended Coupon Code, EAN-13, Interleaved 2 of 5, Matrix 2 of 5, Plessey, PosiCode, GS1 Databar, Straight 2 of 5 IATA, Straight 2 of 5 Industrial, Telepen, Trioptic Code, UCC/EAN-128, UPC and UPC-A (Dolphin 9501/9551 scans only 1D symbolologies.)	
<b>2D Symbolologies Read:</b>	Aztec, Code 16K, Composite, Data Matrix, MaxiCode, OCR, PDF417, QR Code, GS1 Databar	
<b>Composite and OCR Codes:</b>	Aztec Mesa, Codablock F, EAN-UCC, GS1 Databar-14 and OCR-A and OCR-B	
<b>Postal Codes:</b>	Postnet, Australian, British, Canadian, China, Japanese, KIX (Netherlands), and Korea Post, Planet Code	
<b>Keyboards:</b>	Three backlit keyboard options: 35-key numeric-shifted alpha, 43-key alpha-shifted numeric, and 56-key full alpha/numeric	

## Data Outputs

<b>Display:</b>	1/4 VGA (240 x 320 portrait mode) color TFT LCD display with industrial-grade touch panel
<b>I/O Ports:</b>	Mechanical connector supports communication—USB 1.1 and serial RS-232 up to 115 Kbps—and charges via cradles AC adapter cables, Integrated IrDA port, Integrated audio jack that acts as a speaker and a microphone
<b>Mass Storage:</b>	User-accessible Secure Digital memory interface

## Wireless Radio Options

<b>WWAN (9500 Only):</b>	GSM quad band (850/900/1800/1900MHz) radio with accessible SIM card interface, GSM release 99, EDGE (E-GPRS) multi-slot class 10, GPRS multi-slot class 12
<b>WLAN:</b>	IEEE 802.11b DSSS Authentication Methodologies: LEAP, MD5, TLS, TTLS, PEAP, and WEP
<b>WPAN:</b>	Bluetooth (Class 2)

## Physical

<b>Dimensions:</b>	9500/9501—9.6"L x 3.45"W x 1.66"D at display (24.53 x 8.76 x 4.23 cm), 2.7"W x 1.5"D at grip (6.9 x 3.8 cm) 9550/9551—9.6"L x 3.45"W x 2.27"D at display (24.53 x 8.76 x 5.76 cm), 2.7"W x 1.5"D at grip (6.9 x 3.8 cm)
<b>Weight:</b>	9500—Batch: 19.7 oz. (558 gm), WLAN: 20.2 oz. (573 gm), WPAN: 20 oz. (567 gm), WLAN/WPAN: 20.3 oz. (576 gm) 9501—22.65 oz. (642 gm), all versions 9550—Batch: 23.4 oz. (663 gm), WLAN: 23.9 oz. (677.5 gm) 9551—25.8 oz. (732 gm), all versions
<b>Operating Temperature:</b>	14 to 122°F (-10°C to 50°C); can operate down to -20°C with potential degradation in performance depending on the application
<b>Storage Temperature:</b>	-4° to 158°F (-20° to 70°C)
<b>Humidity:</b>	95% humidity, non-condensing
<b>Electrical Static Discharge:</b>	15 KVA on all surfaces
<b>Impact Resistance:</b>	Withstands multiple 5 ft. (1.5m) drops onto concrete
<b>Environmental Resistance:</b>	Independently certified to meet IP64 standards for moisture and particle resistance
<b>Power:</b>	Lithium-ion battery technology with a 7.4V, 14.8 watt-hour main battery with hot-swappable design for fast replacement in the field
<b>Other:</b>	Integrated stylus with optional tether and removable hand strap

## Peripherals/Accessories

<b>Dolphin HomeBase™:</b>	Charging/communications cradle with auxiliary battery well. Data transfer via RS-232 serial or USB ports
<b>Dolphin Mobile Base™:</b>	Mobile charging/communication cradle. Data transfer via RS-232 serial. Power out at 5 volts for peripheral devices
<b>Dolphin QuadCharger™:</b>	Four-slot battery charger that charges four batteries in under four hours. One slot doubles as a battery analyzer
<b>Dolphin Mobile Charger:</b>	Charges a Dolphin terminal by plugging into a vehicle cigarette lighter/power port
<b>Dolphin NetBase:</b>	Four-slot charging/communication cradle designed for Ethernet-based communications
<b>Dolphin ChargeBase:</b>	Four-slot charging cradle—each slot holds, powers, and charges a terminal

## Regulatory Approvals

<b>FCC-CE-Radio Country:</b>	US/Canada, R&TTE
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## Auf einen Blick

- Sehr leicht und einfach zu Hand haben
- Kann fast alle RFID und Smart Labels im 13,56 MHz Bereich lesen
- Ist ergonomisch an den Hand Held Computer 9500 angepasst



## Snap-i

Snap-i ist ein hochleistungsfähiger RFID Schreib-/Lese-Adapter für die Handheld 9500 Serie.

Einfach aufstecken und RFID Chips lesen oder beschreiben. Snap-i kann die häufigsten Industriestandard RFID Tags und Smart Labels wie ISO 15693, I-Code und Tag-It lesen.

### Physikalische Beschreibung

Gewicht: 66g

Abmessungen: 169 mm x 75 mm, 75 mm Bauhöhe

Länge am MDE: + 55 mm

### Spezifikationen

Frequenz: 13,56 MHz

Antenne: intern

RF Datenrate: 26 kbps ISO15693, 106 kbps ISO14443

Host Datenrate: I2C bus 400 kHz, SPI bus 3 MHz

### Standard Funktionen

Kommunikation: RS232 Verbindung zu HHP 9500

Spannungsversorgung: über RS232

Stromaufnahme: 45 mA @ 5V, 100 mA @ 1.8 V, 50 uA Sleep

Prozessor: 240 KB Benutzerdaten, 8 KB Programmspeicher

Leseabstand: je nach Transponder Größe, z.B. Transponder Chipkarte 75 mm

Firmware: FLASH Speicher für Firmware Update

### Normen

Multitag Reading Texas Instruments:

Tag-It HF-I ISO15693

Tag-It (optional - alte firmware)

Philips:

I-Code SLI ISO15693

I-Code 1

Mifare Ultralight

Infineon: my-d ISO15693

ST Microelectronics: LRI512 ISO15



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