

PDT 8100 Series



Featuring Intel® XScale™ Technology

MOBILE COMPUTERS

Breakthrough Imaging Technology for Diverse Applications

The PDT 8100 Series ruggedized handheld computer from Symbol Technologies features a powerful miniature bar code imaging system with proven intuitive laser aiming, self illumination and dynamic focus for fast, accurate data capture at the point of activity.

Coupled with wireless local area network (WLAN) connectivity, this Pocket PC-based mobile computer is ideal for many applications in stores, distribution centers or customer sites.

Market	Applications	User
Transportation and logistics	Direct store delivery Parcel delivery POD/pick-up Proof of condition	Route accounting professionals
Retail	Price verification Inventory counts Line busting Portable POS	Sales and warehouse clerks
Public safety	Suspect identification Accident scene capture Evidence identification	Law enforcement

Keeps Pace with Your Dynamic Business Needs

The PDT 8100 Series delivers integrated imaging along with Voice-over Wi-Fi™, plus tactile key-based data entry and multiple keyboard options. It combines the strength of the Microsoft® Pocket PC platform with the power of the Intel® XScale™ PXA255 processor, operating at 400 MHz. Equipped with 64 MB of RAM and 64 MB of ROM, the PDT 8100 offers a keyboard and touch-screen to provide multiple modes of data entry for maximum efficiency. In addition, the user-accessible CF slot accommodates a flash memory card or optional third-party Bluetooth™ card for personal area network (PAN) connectivity. Sealed to IP54 standards, the rugged durability of the PDT 8100 also meets the demands of many environments and industries.

Mobile Computing Devices for Today and Tomorrow

The PDT 8100 Series from Symbol Technologies bridges the gap between pen-based and key-based mobile data collection solutions. You can deploy this handheld with full confidence in its superior bar code reading, image quality and ease of use. And you receive the added assurance that thousands of Symbol Pocket PC-based devices are already successfully installed in a variety of mission-critical business applications throughout the globe.



Features	Benefits
Microsoft® Pocket PC platform	Offers a familiar, flexible computing platform for users and developers
Rugged construction	Withstands harsh environments
WLAN communication	Allows anytime, anywhere information access
64 MB RAM, 64 MB ROM	Delivers ample storage capacity for data and applications
3.5 in., 1/4 VGA color display	Increases productivity with large screen for indoor and outdoor use
Intel® XScale™ PXA255 processor at 400 MHz	Gives premium performance with support for video, audio and voice
Keyboard and touchscreen data entry	Offers multiple modes of data entry for maximum efficiency
Back-lit keyboard	Improves usability under low-light conditions
IrDA port and RS-232 ports	Enables data transfer to peripherals such as printers
User-accessible CompactFlash™ card slot	Gives flexibility for expansion, storage and functionality; protection against data loss
Miniature imaging engine	Combines advanced data capture, video, and digital photography
Integrated Voice-over-IP with Wi-Fi™-certified Spectrum24® IEEE 802.11b direct sequence WLAN	Communicates seamlessly, allowing simultaneous voice and data support on the same wireless backbone

For more information, contact us at +1.800.722.6234 or +1.631.738.2400, or visit us on the web at www.symbol.com/pdt8100

PDT 8100 Series with Intel® XScale™ PXA255 Specification Highlights

Physical Characteristics

Dimensions:	Overall:	8.5" L x 3.7" W x 1.8" D 216 mm L x 94 mm W x 46 mm D
	Grip Area:	3.0" W x 1.0" D 76 mm W x 25 mm D
Weight (including battery):	16.5 oz./468 g (batch version) 18.0 oz./510 g (wireless version)	
Drop Specification:	4 ft. (1.2m) to concrete	
Tumble Specification:	.5M: 250 Cycles (500 drops)	
Display:	3.5", 1/4 VGA (320 x 240 portrait) 64k color LCD display	
Battery:	3.7V, 1950 mAh rechargeable lithium-ion	
Environmental Sealing:	IP54 (windblown dust and rain)	
Operating Temperature:	32° to 122° F/0° to 50° C (or better depending on the application)	
Storage Temperature:	-13° to 158° F/-25° to 70° C	
Humidity:	5% to 90% RH noncondensing	
Electrostatic Discharge (ESD):	15 kVdc air; 8 kVdc contact	
Expansion Capabilities:	Type II PC (internal); Type II CF (user-accessible)	
Front-lit Display:	CCFL	
Back-lit Keyboard:	LED	
Keypad:	28-, 37- and 47-key plus 2 side scan keys	

Performance Characteristics

CPU:	Intel® XScale™ PXA255 @ 400 MHz
Operating Platform:	Microsoft® Pocket PC 2002 Premium Edition
Memory:	64 MB RAM/64 MB ROM
Application Development:	Fully compatible with Microsoft SDK for Pocket PCs; Symbol SDK available to support bar code scanning
Communications:	IrDA 1.1; RS-232
Data Capture Options:	1D scan engine Omni-directional 1D and 2D imaging engine with still image capture DB-15 serial port (replaces scan or imaging engine)

Wireless Data Communications

Wireless Local Area Network:	Optional IEEE standards-based Spectrum24 802.11b
Data Rate:	11 Mbps (direct sequence)
Frequency Range:	Country dependent; typically 2.4 to 2.5 GHz
Output Power:	100 mW U.S. and International
Security:	128-bit WEP, Kerberos
Antenna:	Internal (WLAN)
Wireless Personal Area Network:	Optional 3rd party Compact Flash Bluetooth™ module

Imager Engine Specifications

Skew Tolerance:	± 50° from normal
Pitch Angle:	± 60° from normal
Roll:	360°
Ambient Light Immunity:	9,000 ft. candles (96,900 lux)
Scan Element:	
Image Resolution:	640 x 480 pixels (VGA type CCD)
Gray Level:	256 shades of gray
Field of View (FOV):	32.2° Horizontal; 24.5° Vertical
Aiming Element:	
Visible Laser Diode (VLD):	650 nm ± 5 nm
VLD Power:	0.7 mW Maximum
Illumination Element:	
Light Emitting Diode (LED):	635 nm ± 20 nm
Total LED Output Power:	Less than 10 mW
Pattern Angle:	50° (FWHM)

Peripherals and Accessories

Cradles:	1 slot serial charge cradle w/spare battery charging; 1 slot modem cradle w/spare battery charging; 4 slot Ethernet charge cradle; 4 slot charging cradle; Vehicle cradle (spare battery charge, terminal charger data interface)
Communication and Charging Cables:	DEX cable; auto-charge cable; serial/charge cable; printer cables
Speaker/Microphone:	Integrated, plus headset jack, voice recognition capable
Magnetic Stripe Reader (MSR):	Snap-on serial connection swipe reader attachment
4-Slot Universal Battery Charger (UBC2000):	Simultaneous charge of 1-4 batteries; requires adapters for PDT 8100 batteries
Other Accessories:	Snap-on land line modem; carrying case; portable printer (8.5 in. format) with terminal slot; trigger handle (requires trigger compatible terminal); headset

Regulatory

Electrical Safety:	Certified to UL 1950, CSA C22.2 No 950, EN60950/IEC950
EMI/RFI:	FCC Part 15 Class B, ICES-003 Class B, European Union EMC Directive, Australian SMA

ON410 CE



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For system, product or services availability and specific information within your country, please contact your local Symbol Technologies office or Business Partner.

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