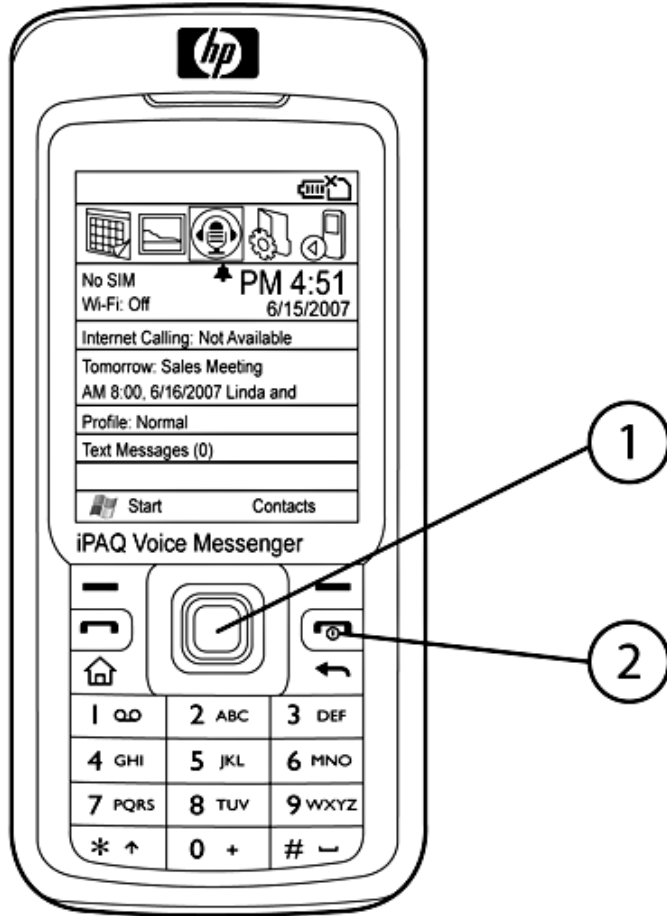


# QuickSpecs

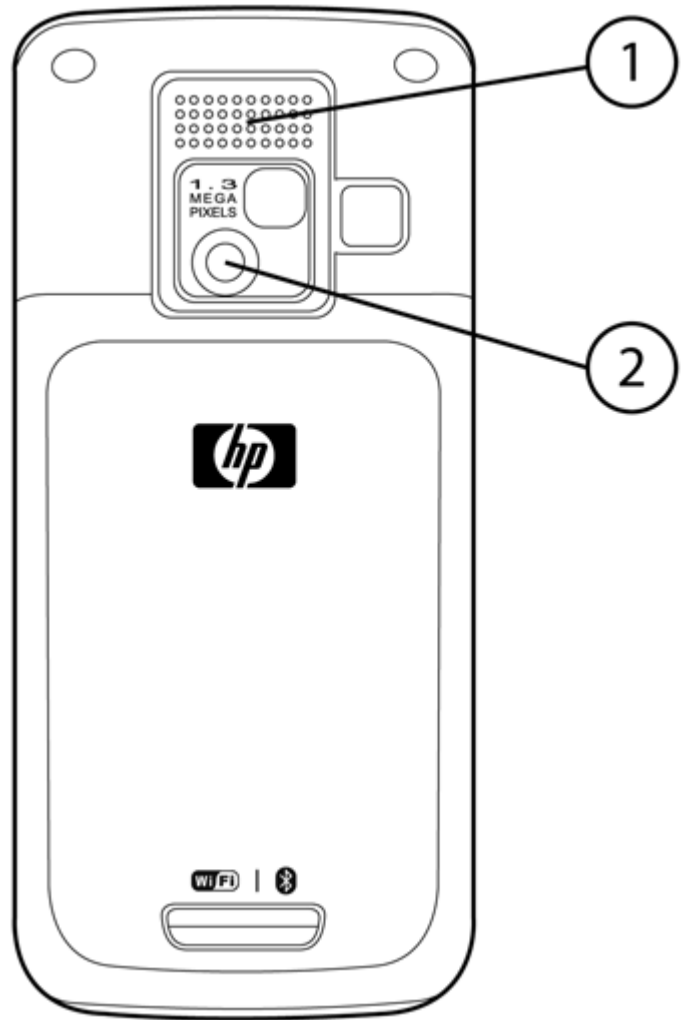
## Overview

### HP iPAQ 500 Series Voice Messenger



Front Image

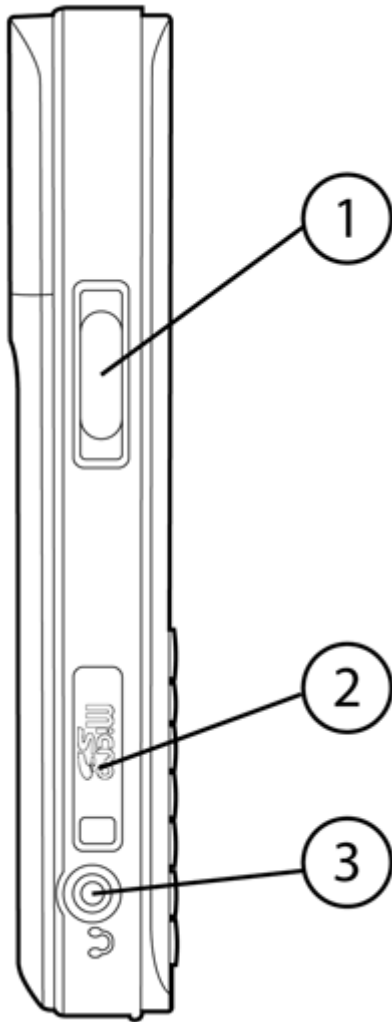
1. Center select/Action button
2. End key and Power On/Off



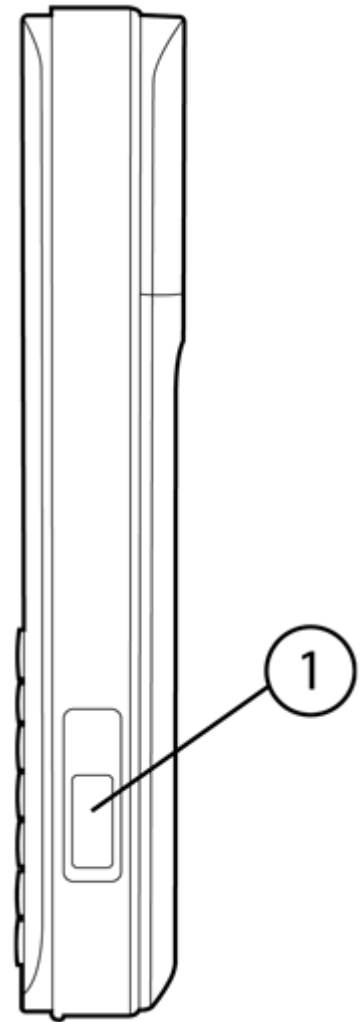
Back Image

1. Speaker
2. 1.3 MP camera

### Overview



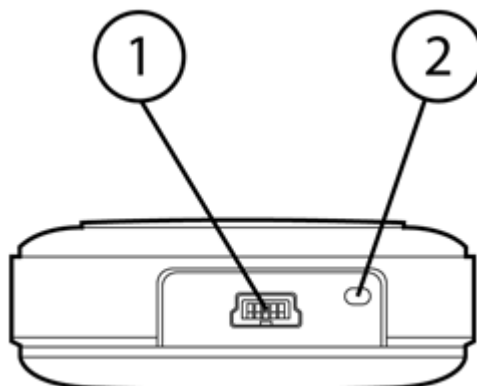
Left Side



Right Side

- 1. Volume Up/Down
- 2. Micro SD
- 3. Headset

- 1. Voice Commander



### Overview

#### Bottom

1. Mini USB/Charger
2. Microphone

### At A Glance

- Smartphone with 12-function keys
- Integrated Antenna
- Integrated Quad band GSM/GPRS/EDGE wireless radio with automatic band transition<sup>1,2,3,4</sup>
- Integrated WiFi – 802.11 b/g with WPA2 security<sup>1</sup>
- Integrated Bluetooth® v1.2 wireless technology
- TI OMAP 850 Processor 200 MHz
- Integrated Micro-SD slot (memory only)
- Integrated 1.3 MP camera
- Removable/rechargeable Li-ion 1100 mAh battery
- 2.0" transfective TFT 176x220 with 64K color LED backlight display
- Windows Mobile® 6 Standard
- Microsoft® Outlook™ Mobile

#### NOTES:

<sup>1</sup> A standard GSM/GPRS/EDGE infrastructure, Wi-Fi, other Bluetooth-enabled devices, separately purchased equipment, and a service contract with a wireless airtime provider may be required for applicable wireless communication. GSM/GPRS/EDGE Wireless Internet access requires separately purchased Internet service contract. Check with service provider for availability and coverage in your area. Not all web content available. GPRS/EDGE may not be available in all networks. GPRS/EDGE data transmission speeds may vary based upon network capabilities and other conditions. Establishment and continuation of a GPRS/EDGE connection depends on network availability, provider support and signal strength.

<sup>2</sup> EDGE (Enhanced Data for Global Evolution) is a global standard for wireless wide-area data communication being rapidly deployed by GSM carriers worldwide. Actual download speeds may vary. Coverage is subject to transmission limitations and terrain, system, capacity and other limitations. Not all features and service options are available in all areas.

<sup>3</sup> Telephone service requires separately purchased contract with a telephone service provider with coverage in your service area. Additional fees may apply for some features, check with your service provider.

<sup>4</sup> Normal GSM Data Calls (CSD) are not basic GSM data services. These services may not be available via all operators, and may require separate subscription. Maximum connection speed is used in defining maximum speed. The GSM Operator may change the speed of connection and reduce time slots at its discretion if the network is congested. These actions may cause lower total data rate than the requested data rate.

### Standard Features

#### Models

HP iPAQ 500 Series Voice Messenger – 128 MB ROM, 64 MB SDRAM, GSM/GPRS/EDGE, Bluetooth, WiFi, camera  
FA887AA#ABA – Generic Commercial – English, French, Spanish

Processor	TI OMAP 850 200 MHz processor <b>NOTE: Processor numbering is not a measurement of higher performance.</b>	
Memory	User Available Memory	64 MB SDRAM main memory for running application 128 MB flash ROM
Display	Type	Micro-reflective TFT 176x220pixel color with LED backlight
	Number of Colors	262k color (262,144 colors) 18-bit <b>NOTE: OS support up to 16-bit (65,536) colors only</b>
	Touch Screen	No
	Resolution (W x H)	176 x 220 pixels
	Dot Pitch	0.18 mm
	Viewable Image Size	2.0 in diagonal
Camera	Resolution	1.3 Mega pixels CMOS
	Image Quality	QCIF (176x144), CIF (352x288), QVGA (320x240), VGA (640x480), SXGA (1280x1024)
	File Format Supported	GIF, JPEG, BMP, PNG
Camcorder	View Finder Size	160 x 120
	Video Size	QCIF 176 x 144
Hardware Buttons/ Reset Buttons	Five-way navigation key, 2 soft keys (both are programmable keys), send/end, home, return, volume control, voice command, and 12-key numeric keyboard with LED backlit keys.	
Audio	Integrated microphone, receiver, speaker and one 2.5 mm stereo headphone jack, stereo (through headphone jack)	
Cradle Interfaces	Connector	USB1.1 client for synchronization and charging
SD Slot	Micro SD	
Power Supply	Battery	Removable/rechargeable 1100 mAh Lithium-Ion (user changeable)
	Battery Performance	Talk time: up to 6.5 hours Standby time: up to 6.7 days (160 hours)
	<b>NOTE: All talk and standby times are approximate and depend on the network configuration, the</b>	



### Standard Features

usage pattern of an individual user, and the configuration of the handheld. Use of internal wireless capabilities and backlight will significantly decrease battery run time.

AC Power AC Input: 100~240 Vac, 50/60 Hz, AC Input current: 0.2 Aac max  
Output Voltage: 5Vdc (typical), Output Current: 1A (typical)

NOTE: Battery run time varies based on the usage pattern of an individual user and the configuration of the handheld. Use of internal wireless capabilities and backlight will significantly decrease battery run time.

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AC Adapter	Dimensions (H x W x D)	3 x 1.9 x 1.8 in (76 x 48 x 44 mm – including prongs), (may vary by model)	
	Cord Length (approx.)	6 ft (1.83 m) USB cable length only	
	Power Supply Ratings	Voltage Range	100 to 240 Vac
		Input Current	0.2Aac
		Input Frequency	50 to 60 Hz
		Output Voltage	5 VDC (typical)
		Output Current	1 Amp (typical)

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System Unit	Dimensions (H x W x D)	4.21 x 1.91 x 0.64 in (107 x 48.6 x 16.3 mm)	
	Weight	3.6 oz (102 g)	
	Operating Temperature	32° to 104° F (0° to 40° C)	
	Storage Temperature	-4° to 140° F (-20° to 60° C)	
	Operating Humidity	85% RH	
	Regulatory Marks	Electrical	FCC Class B, UL or CSA NRTL, CE
		Safety	C-UL, NOM

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Design Features	Numeric keypad, send, end, home, return, 2 soft key, and 5-way navigation, voice command button, volume key, microphone and speaker		
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Operating System	Windows Mobile® 6 Standard		
	Pocket versions of Microsoft software are included (Outlook Mobile, Office Mobile and Internet Explorer for Smartphone)		

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Operating System Applications for Phone Edition	Powered by Windows Mobile® 6 Standard; Calendar, Contacts, Tasks, Voice Recorder, Notes, Pocket Internet Explorer, Windows Media Player 10 (MP3, audio and video streaming), Calculator, Solitaire, Bubble Breaker, Inbox (with Spell Checker for email), File Explorer, VoIP client, Bluetooth Manager, Terminal Services Client, VPN Client, Clock, Memory, Volume control. Word, Excel and Power Point, Microsoft DRM, SIM Toolkit		
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In the box	HP iPAQ 500 Series Voice Messenger, lithium-Ion 1100 mAh removable/rechargeable battery, USB desktop synchronization cable, AC adapter, stereo earbud style headset with 2.5mm jack, charger adapter, Getting Started Guide, How Do I...? Guide and HP iPAQ Companion CD.		
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### Standard Features

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**Additional Software and Links**      Microsoft ActiveSync 4.5 (Desktop device synchronization) and links to Microsoft websites for additional downloadable applications  
**NOTE: Some programs may require purchase of additional desktop software to utilize Smartphone versions.**

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**Service and Support**      One-year parts and labor in most regions; 90 days technical support for software in most regions. Additional offers may vary by region.

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- HP Exclusive Applications**
- HP iPAQ DataConnect – to automatically configure your device for operator network settings
  - HP iPAQ Help and Support
  - HP iPAQ QuickStart Guide
  - HP iPAQ Tips
  - HP iPAQ Setup Assistant
  - Certificate Enroller
  - Asset viewer
  - HP iPAQ Shortcuts
  - VoiceReply to emails
  - Cyberon Voice Command
  - MMS Composer
  - JVM (MIDP 2.0, CLDC 1.1)
  - UMA Client (optional)

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Companion CD from HP	Applications CD Links	Full Versions ActiveSync Handango Microsoft Games AvantGo
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Additional Documentation

Safety and Comfort Guide on PDF, and User Guide on PDF

**NOTE: Programs may vary based on model. Some programs are accessed through CD links to download web sites.**

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GSM/GPRS/EDGE Specifications <sup>1,2,3,4</sup>	Technology	EDGE (Enhanced Data for Global Evolution) Global voice and data wireless network (GSM – Global System for Mobile Communications / GPRS – General Packet Radio Services)
	Operation	Quad band GSM/GPRS / EDGE (GSM 850, E-GSM900, DCS1800, PCS1900 MHz)
	Power class	GSM Phase 2+, Release 99 Class 4 (2W @ 850 MHz) Class 4 (2W @ 900 MHz) Class 1 (1W @ 1800/1900 MHz) GSM 850 8-PSK Class E2 GSM 1900 8-PSK Class E2



### Standard Features

EDGE features	EDGE Class 10 Support for E-GPRS coding schemes MCS1 to MCS9 in both the uplink and downlink
GPRS data features	Class B GPRS Multi slot Class 10 Coding Schemes: CS1 to CS4 Network Mode 1-3
GSM voice features	Half Rate, Full Rate, Enhanced Full Rate and Adaptive Multi-Rate (HR,FR/EFR/AMR) Echo cancellation and noise reduction Full duplex hands free
Circuit switched data <sup>4</sup>	Normal Single Slot GSM Circuit Switched Data @ 9.6 Kbps Transparent and Non-Transparent Data High Speed Circuit Switched Data (HSCSD) multi-slot GSM data calls of maximum uplink / downlink speeds of 43.2Kbps / 14.4Kbps or 28.8Kbps / 28.8Kbps
Supplementary services supported	Call forwarding, Call barring Multiparty, Calling Line Identity Call Waiting and Call Hold
Unstructured supplementary service data	USSD Phase 2 (MO & MT)
Encryption	GEA1
Authentication	Password Authentication Protocol (PAP) or Challenge Authentication Protocol (CHAP)
Messaging services	SMS (Short Message Service) for GSM, both mobile-originated and mobile-terminated SMS MMS (Multimedia Message Service) Cell Broadcast
SIM	1.8V/3.0V SIM standards, Phase 1, 2, 2+, CPHS SIM Toolkit
Ring Tones file formats	MIDI Type 0, WMA, WAV, MP3
Regulatory	Compliant with ETSI GSM Phase 2+ standard
Carrier certification	See <a href="http://www.hp.com">http://www.hp.com</a> (search for iPAQ 500 Series Voice Messenger certifications)
Agency certification	UL, FCC, Industry Canada, CE, IDA, C-Tick

### Wireless LAN (802.11b/g) Specifications<sup>1,2</sup>

Technology	High-speed wireless access to the Internet, email and corporate data
RF Network Standard	IEEE 802 Part 11b/g (802.11b/g)
Frequency Band	2.4000 to 2.4835 GHz 2.4465 to 2.4835 GHz (France) 2.4000 to 2.497 GHz (Japan)
Antenna Type	Embedded Antenna
Security	WEP 64/128-bit compliant to IEEE 802.11 Compliant to 802.1X (EAP-TLS, PEAP)



### Standard Features

	WPA
Network Architecture Models	Ad-hoc (Peer to Peer) Infrastructure (Access Points Required)
Modulation Technique	Direct Sequence Spread Spectrum
Modulation Schemes	DBPSK, DQPSK, CCK, OFDM
Receiver Sensitivity – Packet Error Rate (8E-2)	54 Mbps: <-60 dBm, PER < 8%, typical 11 Mbps: <-80 dBm, PER < 8%, typical 6 Mbps: <-80 dBm, PER < 8%, typical 1 Mbps: <-85 dBm, PER < 8%, typical
Transmit Output Power	12.5 dBm (typical 802.11g) 15 dBm (typical 802.11b)
Power Consumption	Transmit mode: 1.33 Watts, typical Receive mode: 1.235 Watts, typical
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
Protocols Supported	TCP/IP IPX/SPX UDP
Operating Distance	Up to 1000 feet – Open sight
Certifications	All necessary regulatory approvals for countries we support

### Bluetooth® Specifications

Technology	High-speed, low-power, short-range wireless communication with other Bluetooth devices
Bluetooth specifications	v1.2 compliant (2.4-GHz Industrial Scientific Medical Band)
System interface	High-speed UART and PCM processor interface
User interface	Bluetooth Manager
Device type	Class II device; up to 4 dBm transmit, typical 10 meter range
Power	3.6V 5% Peak current – typical TX current at approximately 30 mA – typical RX current at approximately 50 mA
Profile Support	Service Discovery Application Profile Serial Port Profile Generic Object Exchange Profile File Transfer Profile LAN Access Profile Object Push Profile Personal Area Networking Profile Headset Profile Handsfree Profile Advanced Audio Distribution Profile
Usage Models	Service Discovery Determine what Bluetooth devices are within range and support authorization File Transfer



### Standard Features

	File and directory browsing and navigation on another Bluetooth device.
	File copying
	Object manipulation – including add, delete, create new folders etc.
	Serial Port
	Synchronization between PDAs and PCs
	LAN Access
	Wireless link to Corporate LAN using Bluetooth and appropriate Bluetooth access point <sup>1</sup>
	Corporate email, network neighborhood, access to LAN applications, file transfer, ftp, Internet browsing, etc, using TCP/IP <sup>1</sup>
	Access the Internet by connecting to your desktop or notebook over Bluetooth and using its network connection <sup>1</sup>
	Generic Object Exchange and Object Push
	Exchange business cards, tasks, documents, appointments and more <sup>1</sup>
	Personal Area Networking
	Collaborate, chat, play games, exchange data <sup>1</sup>
	Adhoc peer to peer networking <sup>1</sup>
Regulatory standards	R&TT#-EN 300 328 and EN 300 826, UL 1950, CB Safety Scheme inclusive of EN 60950 and IEC 950, FCC Part 15 subpart C, Canadian, CE
Certifications	All necessary regulatory approvals for countries supported including: Bluetooth logo (FCC (47 CFR) Part 15C, Section 15.247&15.249 ETS 300 328, ETS 301 489-1/17 Low Voltage Directive IEC950 UL and CE Mark)

#### NOTE:

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### Options

NOTE: Optional accessories are available at additional cost.

Memory/Storage	256 MB MicroSD Memory Card	FA874AA#AC3
	512 MB MicroSD Memory Card	FA875AA#AC3
	1 GB MicroSD Memory Card	FA876AA#AC3
	2 GB MicroSD Memory Card	FA877AA#AC3
Power	1100 mAh Lithium Ion Standard Battery (SmartPhone 500 series only)	FA889AA#AC3
	Automobile Adapter – mini USB (iPAQ SmartPhone 500 series & RX5000 series)	FA765AA#AC3
	HP iPAQ Travel kit – mini-usb	FA804AA#AC3
	AC Adapter mini-usb for iPAQ SmartPhone 500 series and Rx5000 series	FA762AA#AC3
Synchronization	HP iPAQ Sync Cable – mini-USB	FA801AA#AC3
Other	HP iPAQ 510 Hands Free Car Kit	FA890AA#AC3
	HP iPAQ Bluetooth (HID) Foldable Keyboard	FA802AA#AC3
Cases	Leather Belt Case (iPAQ SmartPhone 500 series only)	FA888AA#AC3
	Custom Cases: to view and order go to: <a href="http://www.casesonline.com">http://www.casesonline.com</a> .	

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For more information on the HP iPAQ Voice Messenger, visit our website at <http://www.hp.ca/iPAQ>.

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### Options

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