QuickSpecs

Overview

HP iPAQ hw6500 Mobile Messenger
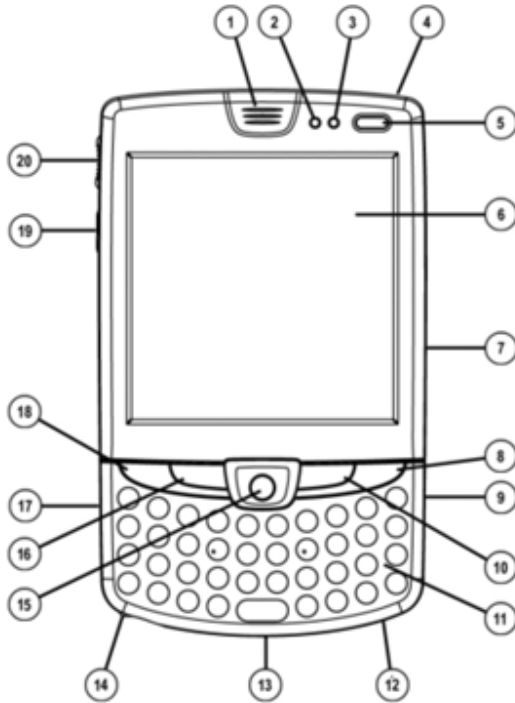
Front Image
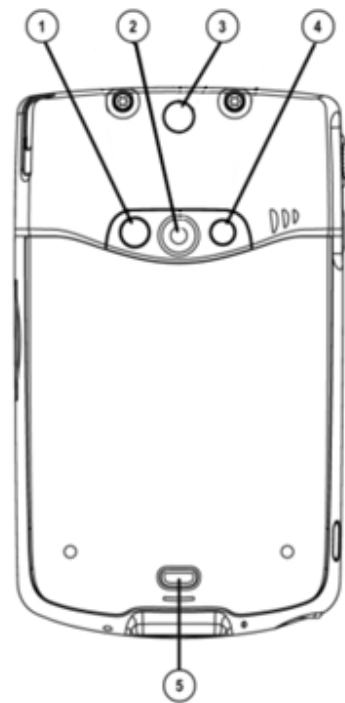
Back Image

1. Speaker
2. Power / notification LED
3. Bluetooth LED
4. Stylus
5. Power button
6. Color display
7. SD slot (side)
8. End button
9. Mini-SD slot (side)
10. Inbox button

11. QWERTY keyboard with LED backlight
12. Reset button
13. 22-pin charge, sync connector
14. Stereo headphone/mic jack
15. 5-way joystick
16. Contacts button
17. IR window (side)
18. Send button
19. Image capture (side)
20. Volume up/down (side)

1. LED light (for photography)
2. 1.3 MP camera
3. External antenna connection
4. Self portrait mirror
5. Battery door cover release

At A Glance

- Integrated Antenna
- Integrated Quad band GSM/GPRS/EDGE wireless radio with automatic band transition [1,2,3,4]
- Integrated GPS Receiver and Navigation software [5]

- Integrated Bluetooth® 1.2 wireless technology
- Intel® PXA270 Processor 312 MHz
- Integrated HP Photosmart 1.3 MP camera
- Integrated thumb keyboard
- Integrated Secure Digital (SDIO) slot
- Integrated Mini-SD slot (memory only)
- Integrated IrDA SIR 1.2
- Removable/rechargeable 1200 mAh battery
- 3.0" transflective TFT QVGA with 64K color LED backlight display
- Microsoft® Windows Mobile ™ 2003 Second Edition software - Phone Edition
- Pocket versions of familiar applicati ons like Microsoft® Outlook®, Word and Excel

NOTES:

[1] A standard GSM/GPRS infrastructure, 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 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 may not be available in all networks. GPRS data transmission speeds may vary based upon network capabilities and other conditions. Establishment and continuation of a GPRS connection depends on network availability, provider support and signal strength.

[2] 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 featur es and service options are available in all areas.

[3] Telephone service requires separately purchased contract with a telephone service provider with coverage in your service area.

[4] Normal GSM Data Calls (CSD) are not basic GSM data services. These servic es 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 cong ested. These actions may cause lower total data rate than the requested.

[5] GPS Navigation (GPS receiver and navigation software) comes with a choice of one city map set from those available from TomTom. Other maps available for purchase from TomTom. Availa ble in United Sta tes, Canada and Western Europe.

QuickSpecs

Standard Features

Models

HP iPAQ hw6515 Mobile Messenger - 64 MB ROM, 64 MB SDRAM, GSM/GPRS/EDGE, Bluetooth, GPS, with camera
FA385A#ABU - United Kingdom & Ir eland
FA385A#ABB - Euro English
FA385A#ABD - Germany
FA385A#ABF - France
FA385A#ABZ - Italy
FA385A#ABE - Spain

HP iPAQ hw6510 Mobile Messenger – 64 MB ROM, 64 MB SDRAM, GSM/GPRS/EDGE, Bluetooth, GPS, no camera
FA384A#ABU - United Kingdom & Ireland
FA384A#ABB - Euro English
FA384A#ABD - Germany
FA384A#ABF - France
FA384A#ABZ - Italy
FA384A#ABE - Spain

Processor	Intel® PXA270 Processor 312 MHz	
	NOTE: Intel's processor numbering is not a measurement of higher performance.	
Memory	User Available Memory	128 MB total memory (64 MB RO M and 64 MB SDRAM) Up to 56 MB user available memory that includes 12 MB iPAQ File Store
Display	Type	Transflective TFT QVGA color with LED backlight with power save mode
	Number of Colors	64K color (65,536 colors) 16 -bit
	Touch Screen	Yes
	Resolution (W x H)	240 x 240 pixels
	Dot Pitch	0.24 mm
	Viewable Image Size	3.0 in (75 mm) diagonal
GPS Receiver	High sensitivity GPS receiver with HP iPAQ Quick GPS Connection Utility and GPS Navigation software application powered by TomTom (EMEA and NA only). Quick GPS Connection is a software application residing on the device that enables a faster connection time for enhanced GPS performance.	
	NOTE: While the GPS radio on your device is able to connect to the GPS satellites without enabling the Quick GPS Connection, it may take a few minutes longer and even up to five minutes to locate the satellites without using the Quick GPS Connection. User required to enable Quick GPS Connection updates.	
Photosmart Camera (on select models)	Resolution	SXGA 1.3 Mega pixels
	Image Quality	1280 x 1024 pixels
	File Format Supported	JPEG and 3GP

Hardware Buttons/ Reset Buttons	Power, soft reset, 5-way navigation joystick, Calendar, Contacts (both are programmable keys, send/end, volume control, and camera capture. QWERTY keyboard with LED backlit keys.	
Stylus	One – Included in the box	
Audio	Integrated microphone, receiver, speaker and one 2.5 mm stereo headphone jack, MP3 stereo (through headphone jack)	
Indicators	LED 1 - Charge and Notify	Flashing Green LED - within GSM coverage area
		Flashing Amber LED - event notification / alarm
		Solid Amber LED - battery charging (Charger connected)
		Solid Green LED - battery fully charged (Charger connected)
		Flashing Red LED - low battery wa rning
	LED 2 – Bluetooth	Flashing Blue LED - Bluetooth radio ON
	Phone Notification	Vibrate
		Audible
		Visual message on the display
Cradle Interfaces	Connector	1 - 22 pin connector for synchronization and charging
	DC Power jack connector for AC/DC Adapter connection	1
Other interfaces	IrDA (SIR)	
	USB 1.1 Client – supported via HP standard 22-pin cradle interface	
	Serial RS232 – supported via HP standard 22 pin cable interface (cable must be purchased separately)	
	NOTE: Some HP authorized o ptions may not be supported. See http://www.hp.com/go/ipaqaccessories .	
SD Slot	Support 1-bit SDIO and 4-bit SD/MMC type memory standard	
Mini SD Slot	Support 1-bit and 4-bit SD/MMC type memory s tandard	
Power Supply	Battery	Removable/rechargeable 1200 mAh Lithium-Ion (user changeable). Optional extended 1800 mAh Lithium-Ion battery available for purchase (http://www.hp.com/eur/hpoptions).
	AC Power	AC Input: 100~240 Vac, 50/60 Hz, AC Input current: 0.3 Aac max

Output Voltage: 5Vdc (typical), Output Current: 2A (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, GPS and backlight will significantly decrease battery run time.

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)	
	Power Supply Ratings	Voltage Range	100 to 240 V Switching
		Input Current	0.3 Aac
		Input Frequency	50 to 60 Hz
		Output Voltage	5 VDC
		Output Current	2 Amp

System Unit	Dimensions (H x W x D)	4.645 x 2.795 x 0.826 in (118 x71 x 21 mm)	
	Weight	5.8 oz (165 g)	
	Operating Temperature	32° to 104° F (0° to 40° C)	
	Storage Temperature	-4° to 140° F (-20° to 60° C)	
	Operating Humidity	90% RH	
	Regulatory Marks	Electrical	FCC Class B, UL or CSA NRTL, CE
		Safety	C-UL, NOM

Design Features	4 programmable application quick-launch buttons, 5-way navigation joystick, touch-sensitive display for stylus or fingertip, voice record button, microphone and speaker

Operating System	Microsoft® Windows Mobile ™ 2003 Second Edition software - Phone Edition
	Pocket versions of Microsoft software are included (Outlook, Word, Excel and Internet Explorer for Pocket PC)

Operating System Applications	Powered by Microsoft® Windows Mobile ™ 2003 Second Edition - Phone Edition; Calendar, Contacts, Tasks, Voice Recorder, Notes, Pocket Word (with Spellchecker), Pocket Excel, Pocket Internet Explorer, Windows Media Player 10 (MP3, audio and video streaming), Calculator, Solitaire, Jawbreaker, Inbox (with Spell Checker f or email), Microsoft Reader (eBooks), File Explorer, Pictures, Terminal Services Client, VPN Client, Infrared Beaming, Clock, Align Screen, Memory, Volume control, ClearType Tuner.

In the box	HP iPAQ hw6500 Mobile Messenger, lithium -Ion 1200 mAh remo vable/rechargeable battery, removable flip cover, stereo earbud style headset with 2.5mm jack, AC adapter, charger adapter USB desktop synchronization cradle, stylus, belt case, Getting Started Guide, How Do I…? Guide and HP iPAQ Pocket PC Companion CD.

Additional Software and links	Outlook 2002, Microsoft ActiveSync 3.7.1 (Desktop device synchronization), Microsoft Reader eBooks, and links to Microsoft websites for additional downloadable applications NOTE: Some programs may require purchase of addit ional desktop software to utilize Pocket PC versions.
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.
HP Exclusive Applications	• GSM/GPRS Settings Manager to automatically configure your device for operator network • GPS Navigation from TomTom (EMEA and NA products) [5] • HP Photosmart Camera: application to take digital photographs with the integrated cameras (certain models) • HP Image Zone for Pock et PC: view images and create slide shows • iPAQ Wireless: manage your wireless connections • HP Profiles: set and name profiles to be used at different times for different functions, such as ring type, volume, brightness and wireless settings • MMS Composer • Bluetooth Manager: manage your Bluetooth connections and settings • iPAQ File Store: non -volatile storage in flash ROM • iPAQ Backup: backup and restore your data to main memory, memory card or iPAQ file store • Pocket Panel Lite: one touch access from Today Scree n to device status; battery, memory, file Explorer, backlight settings • HP Image Transfer: application to transfer digital photographs from the iPAQ to your personal computer • Utilities: Self Test, iPAQ Audio, Power Status • How Do I…? Guide

Companion CD from HP		Full Versions	Trial Versions
	Applications	GPS Map Download. User can choose one map to download. Offer included to purchase full map set ClearVUE Suite (Word and Excel)	Microsoft Voice Dial Application
	CD Links	Handango iPAQ Backup upgrade Microsoft Games	

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.

GSM/GPRS/EDGE Specifications [1,2,3,4]	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 850/900/1800/1900 MHz)
	Power class	Class 5 (0.8W & 2W @ 850MHz) Class 4 (2W @ 900 MHz) Class 1 (1W @ 1800/1900 MHz) GSM 850 8-PSK Class E2 GSM 1900 8-PSK Class E2
	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 1-4
	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 [5]	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	3V SIM standards, Phase 1, 2, 2+, CPHS SIM Toolkit
	Ring Tones file formats	MIDI Type 0, WMA, WAV
	Regulatory	Compliant with ETSI GSM Phase 2+ standard
	Carrier certification	See www.hp.com (search for iPAQ h6000 certifications)
	Agency certification	UL, FCC, Industry Canada, CE, IDA, C-Tick

Bluetooth® Specifications[1]	Technology	High-speed, low-power, short-range wireless communication with other Bluetooth devices
	Bluetooth specification	1.2 compliant (2.4-GHz Industrial Scientific Medical Band)
	System interface	High-speed UART processor interface
	User Interface	Bluetooth Manager
	Device type	Class II device; up to 4 dBm transmit, typical 10 meter range
	Power	3.3V 5% Peak current – typical TX current at approximately 30 mA
		– typical RX current at a pproximately 50 mA
	Profile Support	General Access Profile Service Discovery Application Profile Serial Port Profile Generic Object Exchange Profile File Transfer Profile Dial-Up Networking Profile LAN Access Profile Object Push Profile Personal Area Netw orking Profile Basic Printing Profile Hard Copy Replacement Profile (printing) Headset Profile Handsfree Profile
	Usage Models	**Service Discovery** Determine what Bluetooth devices are within range and support authorization **File Transfer** File and director y 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 **Dial Up Networking** Wireless link to WAN thru Bluetooth enabled n otebook or other access device[2] Agnostic to WAN technology Send/receive SMS messages **LAN Access** Wireless link to Corporate LAN using Bluetooth and appropriate Bluetooth access point [1] Corporate email, network neighborhood, access to LAN applications, fil e transfer, ftp, Internet browsing, etc, using TCP/IP[1]

Access the Internet by connecting to your desktop or notebook over Bluetooth and using its network connection [1]

Generic Object Exchange and Object Push
Exchange business cards, tasks, documents, appo intments and more [1]

Personal Area Networking
Collaborate, chat, play games, exchange data [1]
Adhoc peer to peer networking [1]

Basic Printing and Hard Copy Replacement Profiles
Print to any HP Bluetooth enabled printer without the need for cables or speci fic print drivers

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)

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Options

NOTE: Optional accessories are available at additional cost.

Memory/Storage

256 MB SD Memory Card	FA136A#AC3
512 MB SD Memory Card	FA184A#AC3
1 GB SD Memory Card	FA283A#AC3

Power		
	1200 mAh Lithium Ion Standard Battery	FA404A#AC3
	1800 mAh Lithium Ion Extended Battery	FA405A#AC3
	Automobile Adapter	FA125A#AC3
	Charger Adapter	FA133A#AC3
	AC Adapter	FA372A#AC3

Synchronization		
	Desktop Cradle	FA260A#AC3
	AutoSync Cable (USB and S erial)	FA122A#AC3

Input Devices		
	Stylus Three-pack	FA261A#AC3
	Foldable Keyboard	FA118A#xxx
	iPAQ Bluetooth Folding keyboard	FA287A#AC3

Headphones		
	Bluetooth Stereo Headphones	FA303A#AC3

Cases		
	Leather Belt Case	FA160A#AC3
	Premier Leather B elt Case	FA350A#AC3
	Nylon Slimline Case	FA161A#AC3

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For more information on HP iPAQ Pocket PC, visit our website at   http://www.hp.com/go/iPAQ