

Overview

Models

HP lt2522 LTE/EV DO Verizon WWAN	H4J87AA
HP lt2523 LTE/HSPA+ ATT WWAN	H4J88AA
HP un2430 EV-DO/HSPA Mobile Broadband Module	QC430AA
HP hs2340 HSPA+ Mobile Broadband Module	QC431AA
HP un2420 EV-DO/HSPA Mobile Broadband Module	WD301AA

Introduction

HP Mobile Broadband Modules for select HP Business Notebooks use integrated WWAN technology that allows connection to, and permits roaming on, wireless networks in many countries worldwide. (Separately purchased carrier service required.)

With an HP Mobile Broadband-enabled notebook and wireless carrier service, you can check e-mail, browse the Internet, and connect to corporate networks from anywhere within the coverage area, whether you are stationary or on the go. Enjoy the freedom of connecting in more places, the speed of broadband, the coverage of 3G or 4G networks, and the security, reliability, and ease of use of HP Business Notebooks today!

Key Benefits

- Integrated 3G or 4G WWAN technology from Qualcomm or Ericsson enables high-speed Internet access with a single wireless solution.
- Gobi technology from Qualcomm (QC430AA/WD301AA) allows you to connect in more places** at Broadband speeds with no need to find a Wi-Fi hotspot, and provides access to both CDMA2000® EV-DO and UMTS/HSPA wireless networks.
- The Ericsson mobile broadband module (QC431AA) allows you to connect at 4G speeds so you can get your work done faster than with a 3G connection.
- All cards allow international roaming in many countries** through support for multiple UMTS/HSPA frequency bands and four GPRS/EDGE bands (varies by card, see table on next page) commonly used worldwide.
- Integrated GPS can help you accurately identify your location around the world and permit personal navigation to guide you where you need to go.***
- Integrate into the notebook.
- Connect easily with preloaded software.
- Enhance security by avoiding connections at hotels, airports, and hotspots with built-in support for VPN applications.

* WWAN technology requires separately purchased wireless data service contracts. Check with local service provider for coverage and availability in your area. Limited to mobile network operator coverage areas.

** Broadband connection requires wireless data service contract, network support and is not available in all areas. Contact service provider to determine the coverage area and availability. Connection speeds will vary due to location, environment, network conditions, and other factors.

*** GPS access requires an unobstructed path to multiple satellites. Performance may be affected if/when used inside of buildings, bridges or heavily-congested metropolitan areas. Requires separately-purchased GPS navigation software available from multiple GPS applications.

Overview

Compatibility

Broadband card

HP lt2522 LTE/EV DO Verizon
WWAN

HP lt2523 LTE/HSPA+ ATT
WWAN

HP un2430 EV-DO/HSPA
Mobile Broadband Module

Compatible notebook platform

HP Elitebook 2170p, 2570p, 8470p, and 8570p Notebook PCs
HP Elitebook 8470w, 8570w and 8770w Mobile Workstations

HP Elitebook 2170p, 2570p, 8470p, and 8570p Notebook PCs
HP Elitebook 8470w, 8570w and 8770w Mobile Workstations

HP EliteBook 2170p, 2560p, 2570p, 2760p, 8460p, 8470p, 8560p, and 8570p Notebook PCs
HP EliteBook 8460w, 8470w, 8560w, 8570w, 8760w, and 8770w Mobile Workstations

HP ProBook 6470b, 6475b, and 6570b Notebook PCs

HP ProBook 4340s, 4341s, 4440s, 4441s, and 4540s Notebook PCs

HP ProBook 5330m Notebook PC and HP Slate 2 Tablet PC

(dependent on your carrier in your region)

Factory-configurable options for additional select HP notebooks. Please see the QuickSpecs for your notebook for additional compatibility information.

HP hs2340 HSPA+ Mobile
Broadband Module

HP EliteBook 2560p, 2760p, 8460p, and 8560p Notebook PCs

HP EliteBook 8460w, 8560w, and 8760w Mobile Workstations

HP ProBook 5330m Notebook PC

(dependent on your carrier in your region)

Factory-configurable options for additional select HP notebooks. Please see the QuickSpecs for your notebook for additional compatibility information.

HP un2420 EV-DO/HSPA
Mobile Broadband Module

HP EliteBook 8440p and 8540p Notebook PCs

HP EliteBook 8440w and 8540w Mobile Workstations

HP ProBook 5310m Notebook PC

Factory-configurable options for additional select HP notebooks. Please see the QuickSpecs for your notebook for additional compatibility information.

NOTE: Not all models are available in all regions.

Service and Support

Each HP Mobile Broadband Module has a one-year limited warranty or the warranty remaining for the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day, as well as in online support forums. Certain restrictions and exclusions apply.

Technical Specifications

	HP It2522 LTE/EV DO Verizon WWAN	HP It2523 LTE/HSPA+ ATT WWAN
Technology/Operating Bands	CDMA/1xRTT/EvDO: 800 MHz (Cell), 1900 MHz (PCS) GSM/GPRS/EDGE: 850MHz(Cell), 900MHz(EGSM), 1800MHz(DCS), 1900MHz (PCS) UMTS/WCDMA with receive diversity: 2100MHz (UTRA FDD Band I), 1900Mhz (UTRA FDD Band II), 900Mhz(UTRA FDD Band VIII), 850 MHz (UTRA FDD Band V) LTE: 700 MHz (Verizon, Band XIII)	GSM/GPRS/EDGE: 850MHz(Cell), 900MHz(EGSM), 1800MHz(DCS), 1900MHz (PCS) UMTS/WCDMA with receive diversity: 2100MHz (UTRA FDD Band I), 1900Mhz (UTRA FDD Band II), 850 MHz (UTRA FDD Band V) LTE: AWS (Band IV) 700 MHz (AT&T, Band XVII)
Wireless Protocol Standards	GSM/GPRS/EDGE: Class B, Multi-slot class 10 operation, coding schemes CS1 - CS4 and MSC1 - MSC9. CDMA: 1xEVDO Release 0 and Release A, IS-95A, IS-95B, IS-856, IS-2000 UMTS/WCDMA: Release 99 and Release 7 LTE: Power Class III as per 3GPP TS 36.101	LTE: Power Class III as per 3GPP TS 36.101
Wireless Parametric Standards	Complies with 3GPP specifications Release 8 for LTE	
Maximum Data Rates	EvDO (Revision A) – 3.1 Mbps (Download), 1.8 Mbps (Upload) WCDMA (DC-HSPA+) – 42Mbps (Download) LTE (Category 3) –100 Mbps (Download), 50Mbps (Upload)	WCDMA (DC-HSPA+) – 42Mbps (Download) LTE (Category 3) – 100 Mbps (Download), 50Mbps (Upload)
GPS	Standalone, Assisted, XTRA	
GPS Bands	1575.42 MHz (± 1.023 MHz)	
Maximum Output Power	GSM/GPRS/EDGE: 32dBm (+/-1) WCDMA: 24dBm (+0.7/-2.3) LTE: +23 dBm (+2.7 dBm/-1.7 dBm) 1xRTT/EvDO: +24 dBm (+0.5 dBm/-1.5 dBm)	GSM/GPRS/EDGE: 32dBm (+/-1) WCDMA: 24dBm (+0.7/-2.3) LTE: +23 dBm (+2.7 dBm/-1.7 dBm)
Maximum Power Consumption	2700mA (peak)	
Power Consumption, Sleep Mode	10 mA	
Power Management	USB selective suspend; Integrated notebook wireless button	
Antenna Type	Dual high efficiency 6 band antennae with spatial diversity, mounted in the display enclosure	
Form Factor	PCI-Express MiniCard, USB 2.0 interface	
Weight	< 10 g	
Dimensions (Length x Width x Thickness)	2.01 x 1.18 x 0.18 in (51 x 30 x 5 mm)	
Voltage, Operating	3.3v +/- 9%	3.3v +/- 9%
Temperature, Operating (from TIA/EIA/IS-98-D)	-4° to 149° F (-20° to 65° C)	14° to 149° F (-10° to 65° C) (full RF performance) 14° to 167° F (-10° to 75° C) (reduced RF performance)
Temperature, Non-operating, 96 hours (from MIL-STD 202 Method 108)	-40° to 185° F (-40° to 85° C)	-22° to 185° F (-30° to 85° C)

Technical Specifications

Humidity, Non-operating

85% relative humidity for 48 hours @ 185° F (85° C) (non-condensing)

Configuration Utilities

HP Connection Manager

LED Activity

LED Off - Radio Off; Solid LED On - Radio On

	HP un2430 EV-DO/HSPA Mobile Broadband Module	HP hs2340 HSPA+ Mobile Broadband Module	HP un2420 EV-DO/HSPA Mobile Broadband Module
Technology/Operating Bands	GSM/GPRS/EDGE: 850MHz(Cell), 900MHz(EGSM), 1800MHz(DCS), 1900MHz (PCS) UMTS/WCDMA with receive diversity: 2100MHz (UTRA FDD Band I), 1900MHz (UTRA FDD Band II), 900MHz (UTRA FDD Band VIII), 850MHz (UTRA FDD Band V) 1xEVDO/1xRTT with receive diversity: 850MHz (Band Class0-Cell), 1900MHz (Band Class1-PCS)	GSM/GPRS/EDGE: 850MHz(Cell), 900MHz(EGSM), 1800MHz(DCS), 1900MHz (PCS) UMTS/WCDMA with receive diversity: 2100MHz (UTRA FDD Band I), 1900MHz (UTRA FDD Band II), 900MHz(UTRA FDD Band VIII), 850 MHz (UTRA FDD Band V)	GSM/GPRS/EDGE: 850MHz(Cell), 900MHz(EGSM), 1800MHz(DCS), 1900MHz (PCS) UMTS/WCDMA with receive diversity: 2100MHz (UTRA FDD Band I), 1900MHz (UTRA FDD Band II), 900MHz (UTRA FDD Band VIII), 850MHz (UTRA FDD Band V) 1xEVDO/1xRTT with receive diversity: 850MHz (Band Class0-Cell), 1900MHz (Band Class1-PCS)
Wireless Protocol Standards	GSM/GPRS/EDGE: Class B, Multi-slot operation, coding schemes CS1 - CS4 and MSC1 - MSC9. UMTS/WCDMA: Release 99 and Release 6 CDMA: 1xEVDO Release 0 and Release A, IS-95A, IS-95B, IS-2000	GSM/GPRS/EDGE: Class B, Multi-slot class 10 operation, coding schemes CS1 - CS4 and MSC1 - MSC9. UMTS/WCDMA: Release 99 and Release 7 Advanced Receiver Type 3i	GSM/GPRS/EDGE: Class B, Multi-slot operation, coding schemes CS1 - CS4 and MSC1 - MSC9. UMTS/WCDMA: Release 99 and Release 6 CDMA: 1xEVDO Release 0 and Release A, IS-95A, IS-95B, IS-2000
Wireless Parametric Standards	Meets or exceeds TIA/EIA IS-98-D	Complies with 3GPP specifications	Meets or exceeds TIA/EIA IS-98-D
Maximum Data Rates	UMTS (HSPA) - 14.4 Mbps (Download), 5.76 Mbps (Upload) CDMA (EVDO Release A) - 3.1 Mbps (Download), 1.8 Mbps (Upload)	UMTS (HSPA) - 21 Mbps (Download), 5.76Mbps (Upload)	UMTS (HSPA) - 7.2 Mbps (Download), 5.76 Mbps (Upload) CDMA (EVDO Release A) - 3.1 Mbps (Download), 1.8 Mbps (Upload)
GPS	Standalone GPS enabled	Standalone, A-GPS (Internet- and Network assisted)	Standalone GPS enabled
GPS Bands	L1 - 1575.42 MHz	1575.42 MHz (± 1.023 MHz)	L1 - 1575.42 MHz
Maximum Output Power	GSM/GPRS/EDGE: 32dBm (+/-1) WCDMA: 24dBm (+/-1) CDMA: 24dBm (+/-1)	GSM/EDGE GSM850 & GSM900 bands GPRS: +33 dBm ± 2 dBm (class 4) EGPRS: +27 dBm ± 3 dBm (class E2) DCS1800 & PCS1900 bands GPRS: +30 dBm ± 2 dBm (class 1) EGPRS: +26 dBm +4 / -3 dBm (class E2) UMTS UTRA FDD Bands	GSM/GPRS/EDGE: 32dBm (+/-1) WCDMA: 24dBm (+/-1) CDMA: 24dBm (+/-1)

Technical Specifications

		+24 dBm +4 / -3 dBm (class 3)	
Maximum Power Consumption	2500mA (peak); 1000mA (average)	2000mA (peak); 600mA (average)	2500mA (peak); 1000mA (average)
Power Consumption, Sleep Mode	5 mA		
Power Management	USB selective suspend; Integrated notebook wireless button		
Antenna Type	Dual high efficiency 5 band antennae with spatial diversity, mounted in the display enclosure		
Form Factor	PCI-Express MiniCard, USB 2.0 interface		
Weight	11.5 g	< 12 g	11.5 g
Dimensions (Length x Width x Thickness)	2.01 x 1.18 x 0.18 in (51 x 30 x 5 mm)		
Voltage, Operating	3.3v +/- 10%	3.3v +/- 9%	3.3v +/- 10%
Temperature, Operating (from TIA/EIA/IS-98-D)	-22° to 140° F (-30° to 60° C) (full RF performance) -22° to 167° F (-30° to 75° C) (reduced RF performance)	14° to 149° F (-10° to 65° C) (full RF performance) 14° to 167° F (-10° to 75° C) (reduced RF performance)	-22° to 140° F (-30° to 60° C) (full RF performance) -22° to 167° F (-30° to 75° C) (reduced RF performance)
Temperature, Non-operating, 96 hours (from MIL-STD 202 Method 108)	-40° to 185° F (-40° to 85° C)	-22° to 185° F (-30° to 85° C)	-40° to 185° F (-40° to 85° C)
Humidity, Non-operating	85% relative humidity for 48 hours @ 185° F (85° C) (non-condensing)		
Configuration Utilities	HP Connection Manager		
LED Activity	LED Off - Radio Off; Solid LED On - Radio On		

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