

### Overview

#### HP AC Adapters for HP Business Notebooks

#### Models

##### Standard Smart AC Adapters

HP 45W Smart AC Adapter (4.5mm)	H6Y88AA
HP 65W Smart AC Adapter (4.5mm)	H6Y89AA
HP 90W Smart AC Adapter (4.5mm)	H6Y90AA
HP 150W Smart AC Adapter (4.5mm)	W2F74AA
HP 200W Smart AC Adapter (4.5mm)	W2F75AA

##### Slim AC Adapters

HP 65W Slim AC Adapter	H6Y82AA
HP 90W Slim AC Adapter	H6Y83AA
HP 150W Smart AC Adapter	AL192AA
HP 230W Slim AC Adapter	H1D36AA

##### Specialized Travel Adapters

HP 65W Smart Travel AC Adapter	J0E43AA
HP 90W Slim Combo Adapter with USB	H6Y84AA

##### Adapter

HP 15W mUSB Power Adapter	K9Q38AA
HP 45W USB-C™ AC Adapter <b>New!</b>	V5Y26AA

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#### Introduction

HP includes a high quality AC adapter with each HP Business Notebook, HP Ultrabook, and HP Docking Station. Designed and tested to ensure optimum power support, the adapter also charges the notebook's internal battery simultaneously when connected.

As a notebook user, you may also need your adapter to be as flexible as your notebook. HP offers a variety of adapters for the many circumstance in which you may use your notebook. Whether you want something compact to carry, have a unique travel situation, or would just like another AC adapter for the office or home, HP offers an adapter for almost every computing situation.

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### Overview

#### Compatibility

##### Adapter

##### Standard Smart AC Adapters

HP 45W Smart AC Adapter (4.5mm) (H6Y88AA)

##### Compatible HP Business Notebooks

HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040, Folio 9470m  
HP EliteBook 1040 G1, G2, 1020 G1, 800 G1, G2, G3 Series 700 G1, G2, G3, Series , 600 G1, G2 Series,  
HP Revolve 810 G1, G2, G3 Series  
HP Elite Tablet x2 1011 G1, HP Pro Tablet 610 G1,  
HP 430, 440 450 G2 Series  
HP 215, 240 G2, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook 11 G1 Education G1, G2,  
HP Pro x2 612 G1  
HP Stream 11 G1, G2  
HP ProBook x2 410 G1  
HP ChromeBook 11 EE, G3, G4

HP 65W Smart AC Adapter (4.5mm) (H6Y89AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, Folio 9470m, Revolve 810, 2XXXp, 84XXp, and 85XXp Notebook PCs, HP ZBook 14, EliteBook 84XXw Mobile Workstations,  
HP Mini 51XX, HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, and HP ProBook 6360t Thin Clients

HP 90W Smart AC Adapter (4.5mm) (H6Y90AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, 2XXXp, and 8XXXp, Folio 9470m, Revolve 810 Notebook PCs, HP ZBook 14, and EliteBook 84XXw, and 8540w Mobile Workstations,  
HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, HP ProBook 6360t Thin Clients

**HP 150W 4.5mm Smart AC Adapter (W2F74AA)**

HP ZBook Studio G3, HP ZBook 15 G3 and HP ZBook 15u G3 mobile workstations

**HP 200W 4.5mm Smart AC Adapter (W2F75AA)**

HP ZBook 17 G3

##### Slim AC Adapters

HP 65W Slim AC Adapter (H6Y82AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, Folio 9470m, Revolve 810, 2XXXp, 84XXp, and 85XXp Notebook PCs, HP ZBook

### Overview

14, EliteBook 84XXw Mobile Workstations, HP Pavilion 14 Chromebook, HP Folio13 Notebook PC, HP SpectreXT Pro Ultrabook™, HP ENVY Pro Ultrabook™, HP Mini 51XX, HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, and HP ProBook 6360t Thin Clients

#### HP 90W Slim AC Adapter (H6Y83AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, 2XXXp, and 8XXXp, Folio 9470m, Revolve 810 Notebook PCs, HP ZBook 14, and EliteBook 84XXw, and 8540w Mobile 2Workstations, HP Pavilion 14 Chromebook, HP Folio13 Notebook PC, HP SpectreXT Pro Ultrabook™, HP ENVY Pro Ultrabook™, HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, HP ProBook 6360t Thin Clients

#### HP 150W Smart AC Adapter (AL192AA)

HP ProBook 6440b, 6445b, 6540b, and 6545b Notebook PCs, HP Zbook 15, EliteBook 8570w, 8560w, and 8540w Mobile Workstations

#### HP 230W Slim AC Adapter (H1D36AA)

HP Zbook 15, 17, EliteBook 8570w, 8770w, 8560w, 8760w, 8540w, and 8740w Mobile Workstations

### Specialized Travel Adapters

#### HP 65W Smart Travel AC Adapter (JOE43AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, Folio 9470m, Revolve 810, 2XXXp, 84XXp, and 85XXp Notebook PCs, HP ZBook 14, EliteBook 84XXw Mobile Workstations, HP Pavilion 14 Chromebook, HP Folio13 Notebook PC, HP SpectreXT Pro Ultrabook™, HP ENVY Pro Ultrabook™, HP Mini 51XX, HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, and HP ProBook 6360t Thin Clients

#### 90W Slim Combo Adapter with USB (H6Y84AA)

HP ChromeBook 14, HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040 Notebook PCs, HP 215, 240 G2, 242 G1, 245 G2, 250 G2, 255 G2 Notebook PCs  
HP ProBook Notebook PCs, HP EliteBook 8XX, 2XXXp, and 8XXXp, Folio 9470m, Revolve 810 Notebook PCs, HP EliteBook Mobile Workstations, HP Pavilion 14 Chromebook, HP Folio13 Notebook PC, HP SpectreXT Pro Ultrabook™, HP ENVY Pro Ultrabook™, HP 31XXm, HP 240, 246, 248, 340, 250, 255, 430, 431, 435, 436, 450, 455, 630, 631, 635, 636, 650, and 655 Notebook PCs, HP mt20, mt40, mt41, HP ProBook 6360t Thin Clients

### Overview

HP 15W mUSB Power Adapter (K9Q38AA)

HP 45W USB-C Power Adapter (V5Y26AA)

HP Chromebook 11

HP x2 1012 G1 Tablet, HP EliteBook 1030 G1

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### Service and Support

The warranty period for HP Adapters is one year, part replacement. Additional support is available (North America only) seven days a week, 24 hours a day by phone as well as through online support forums.

### Technical Specifications

#### HP Smart AC Adapters

The HP Smart AC Adapter is the adapter included with all HP Business Notebooks and HP Docking Stations. The Smart AC Adapter is intelligent by design because it detects and regulates the electrical current that is needed for your notebook or docking station. This unique feature helps protect your product from erratic electrical currents or a power surge. Also, although you may need a higher capacity adapter for a docking station or another notebook in the office, the Smart AC Adapter can be used with any notebook - it will adjust to the power to whatever your notebook needs.

- Add an additional adapter and always have one available in the office or at home - no need to carry it with you at all times
- designed to enable optimum system performance

	<b>HP 45W Smart AC Adapter (H6Y88AA)</b>
<b>Dimensions</b>	3.77 x 1.95 x .88 in (96 x 49.5 x 22.4 mm)
<b>Weight</b>	7.09 oz (201 g)
<b>Input</b>	90 to 265 VAC
<b>Input Efficiency</b>	87% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz
<b>Input AC current</b>	1.4 A at 90 VAC
	<b>Output</b>
<b>Output power</b>	45W
<b>DC output</b>	
<b>Hold-up time</b>	5 msec at 115 VAC input
<b>Output current limit</b>	8A
<b>Connector</b>	HP 4.5mm Smart Barrel
	<b>Environmental design</b>
<b>Operating temperature</b>	41° to 95° F (5° to 35° C)
<b>Non-operating (storage) temperature</b>	-4° to 185° F (-20° to 85° C)
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)
<b>Humidity</b>	Up to 95%
<b>Storage humidity</b>	Up to 95%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, cUL, GS, Australian Electric Permit, RCM, NOM, CCC, KC, CU, S mark, BSMI, ISC, PSE, PSB, NRcan, Ukrain and SII
<b>Option kit contents</b>	

### Technical Specifications

	HP 45W Smart AC Adapter, 4.5mm to 7.4mm power DC dongle, power cord, warranty booklet
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	HP 65W Smart AC Adapter (ED494AA)	HP 65W Smart AC Adapter (H6Y89AA)
<b>Dimensions</b>	4.17 x 1.85 x 1.1 in (106 x 47 x 28 mm)	4.17 x 1.85 x 1.1 in (106 x 47 x 28 mm)
<b>Weight</b>	0.62 lb (280 g)	0.62 lb (280 g)
<b>Input</b>	90 to 265 VAC	90 to 265 VAC
<b>Input Efficiency</b>	84% min at 115 VAC	84% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz	
<b>Input AC current</b>	1.7 A at 90 VAC, 0.85 A at 180 VAC	1.7 A at 90 VAC, 0.85 A at 180 VAC
	<b>Output</b>	
<b>Output power</b>	65W	65W
<b>DC output</b>	18.5V	18.5V
<b>Hold-up time</b>	5 msec at 115 VAC input	
<b>Output current limit</b>	<5A, Over voltage protection- 29V max automatic shutdown	<5A, Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	HP 7.4mm Smart Barrel	HP 4.5mm Smart Barrel
	<b>Environmental design</b>	
<b>Operating temperature</b>	41° to 95° F (5° to 35° C)	41° to 95° F (5° to 35° C)
<b>Non-operating (storage) temperature</b>	-4° to 185° F (-20° to 85° C)	-4° to 185° F (-20° to 85° C)
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)	
<b>Humidity</b>	Up to 95%	Up to 95%
<b>Storage humidity</b>	Up to 95%	Up to 95%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.	
<b>Option kit contents</b>	HP 65W Smart AC Adapter, power cable, 65W non-Smart dongle, warranty booklet	HP 65W Smart AC Adapter, 4.5mm to 7.4mm power DC dongle, power cord, warranty booklet

### Technical Specifications

<b>HP 90W Smart AC Adapter (H6Y90AA)</b>	
<b>Dimensions</b>	5.00 x 1.97 x 1.1 in (127 x 50 x 29 mm)
<b>Weight</b>	0.82 lb (370 g)
<b>Input</b>	100 to 240 VAC
<b>Input Efficiency</b>	83% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz
<b>Input AC current</b>	1.5 A at 90 VAC, 0.75 A at 180 VAC PFC Version 2.4 A at 90 VAC, 1.2 A at 180 VAC NON PFC Version
<b>Output power</b>	90W
<b>DC output</b>	19.0V
<b>Hold-up time</b>	5 msec at 115 VAC input
<b>Output current limit</b>	<11A, Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	HP 4.5 mm Smart Barrel
<b>Environmental design</b>	
<b>Operating temperature</b>	32° to 104° F (0° to 40° C)
<b>Non-operating (storage) temperature</b>	-4° to 149° F (-20° to 65° C)
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)
<b>Humidity</b>	20% to 80%
<b>Storage humidity</b>	10% to 90%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.
<b>Option kit contents</b>	HP 90W Smart AC Adapter, 4.5mm to 7.4mm power DC dongle, power cord, warranty booklet

	<b>HP 150W 4.5mm Smart AC Adapter (W2F74AA)</b>	<b>HP 200W 4.5mm Smart AC Adapter (W2F75AA)</b>
<b>Dimensions</b>	6.02 x 25 x 0.88 in (15 x 66 x22 mm)	6.77 x 3.77 x1 in (172 x 96 x 25.4 mm)
<b>Weight</b>	0.705 lb (320g)	1.92 lb (875g)
<b>Input</b>	90 to 265 VAC RMS.	90 to 265 VAC RMS.
<b>Input Efficiency</b>	88% min at 115 VAC	88% at 115 VAC input and 89% at 230 VAC
<b>Input frequency range</b>	47 – 63 Hz AC.	
<b>Input AC current</b>	2.7 A at 90 VAC	2.7 A at 90 VAC
	<b>Output</b>	
<b>Output power</b>	150W	200W
<b>DC output</b>	19.50V +5.0%/-5%	19.50V +5.0%/-5%
<b>Hold-up time</b>	5 msec at 115 VAC input	
<b>Output current limit</b>	<-15 A, Over voltage protection- 29V max automatic shutdown	<-16 A, Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	HP 4.5 mm Smart Barrel	HP 4.5 mm Smart Barrel
<b>Environmental design</b>		

### Technical Specifications

<b>Operating temperature</b>	0 to 35°C.	0 to 35°C.
<b>Non-operating (storage) temperature</b>	-20 to 85°C.	-20 to 85°C.
<b>Altitude</b>	Operating 10,000 ft above sea level or 5,000m above sea level with a 32°C maximum ambient air temperature Non-operating 50,000 ft (15,240m) above sea level	
<b>Humidity</b>	Up to 95%	Up to 95%
<b>Storage humidity</b>	Up to 95%	Up to 95%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.	
<b>Warranty</b>	1 year	
<b>Option kit contents</b>	AC Power brick, Country Power cord, 4.5mm to 7.4mm power dongle, Quick Set up Guide, Warranty Notification	AC Power brick, Country Power cord, 4.5mm to 7.4mm power dongle, Quick Set up Guide, Warranty Notification

### Technical Specifications

#### HP Slim Adapters

The HP Slim AC Adapters are 40% thinner than the standard notebook adapter.

#### Key benefits:

- Provides a convenient and portable power source for use in a mobile environment
- Includes a convenient USB port for charging other accessories while you work

<b>HP 65W Slim AC Adapter (H6Y82AA)</b>	
<b>Dimensions</b> w/o DC cable	4.72 x 2.28 x 0.67 in (120 x 58 x 17 mm)
<b>Weight</b>	0.49 lb (222.6 g)
<b>Input</b>	100 to 240 VAC
<b>Input efficiency</b>	83% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz
<b>Input AC current</b>	<1.7 A at 90 VAC
<b>Output</b>	
<b>Output power</b>	65W
<b>DC output</b>	19.50V +5.0%/-5.0%
<b>Hold-up time</b>	5 msec at 115 VAC input
<b>Output current limit</b>	<11A, Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	3 pin/grounded, mates with interchangeable cords
<b>Environmental design</b>	
<b>Operating temperature</b>	32° to 104° F (0° to 40° C)
<b>Non-operating (storage) temperature</b>	-4° to 149° F (-20° to 65° C)
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)
<b>Humidity</b>	20% to 80%
<b>Storage humidity</b>	10% to 90%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.
<b>Option kit contents</b>	HP Slim Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable cable, AC power cord, documentation, quick setup poster and warranty

<b>HP 90W Slim AC Adapter (H6Y83AA)</b>	
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### Technical Specifications

<b>Dimensions</b> w/o DC cable	5.43 x 2.28 x 0.67 in (138 x 58 x 17 mm)
<b>Weight</b>	0.49 lb (222.6 g)
<b>Input</b>	100 to 240 VAC
<b>Input efficiency</b>	87% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz
<b>Input AC current</b>	<1.6 A at 90 VAC
<b>Output</b>	
<b>Output power</b>	90W
<b>DC output</b>	19.50V +5.0%/-5.0%
<b>Hold-up time</b>	5 msec at 115 VAC input
<b>Output current limit</b>	<11A, Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	3 pin/grounded, mates with interchangeable cords
<b>Environmental design</b>	
<b>Operating temperature</b>	32° to 104° F (0° to 40° C)
<b>Non-operating (storage) temperature</b>	-4° to 149° F (-20° to 65° C)
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)
<b>Humidity</b>	20% to 80%
<b>Storage humidity</b>	10% to 90%
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.
<b>Option kit contents</b>	HP Slim Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable cable, AC power cord, documentation, quick setup poster and warranty

	<b>HP 150W Smart AC Adapter</b> (AL192AA)	<b>HP 230W Smart AC Adapter</b> (H1D36AA)
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### Technical Specifications

<b>Dimensions</b> w/o DC cable	6.65 x 2.76 x 1.57 in (16.8 x 8.2 x 2.54 mm)	7.9 x 3.9 x 1.02 (200.0 x 100 x 26 mm)
<b>Weight</b>	1.61 lb (730.3 g)	1.79 lb (811.9 g)
<b>Input</b>	90 to 265 VAC	90 to 265 VAC
<b>Input efficiency</b>	87% min at 115 VAC	87% min at 115 VAC
<b>Input frequency range</b>	47 to 63 Hz	
<b>Input AC current</b>	<2.7 A at 90 VAC	<3.5 A at 90 VAC
	<b>Output</b>	
<b>Output power</b>	150W	230W
<b>DC output</b>	19.50V +5.0%/-5.0%	
<b>Hold-up time</b>	5 msec at 115 VAC input	
<b>Output current limit</b>	<15A, Over voltage protection- 29V max automatic shutdown	<18A; Over voltage protection- 29V max automatic shutdown
<b>Connector</b>	HP 7.4mm Smart Barrel	
	<b>Environmental design</b>	
<b>Operating temperature</b>	41° to 95° F (5° to 35° C)	
<b>Non-operating (storage) temperature</b>	-4° to 185° F (-20° to 85° C)	
<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)	
<b>Humidity</b>	10% to 95%	
<b>Storage humidity</b>	10% to 95%	
<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.	
<b>Option kit contents</b>	HP Smart AC Adapter, AC power cord, documentation, quick setup poster and warranty	

### Technical Specifications

#### HP Specialized Travel Adapter

The HP Smart Travel AC Adapter series offers the HP Smart 65W Travel AC Adapter, which is perfect for "road warriors" who are always on the go. The adapter is 40% thinner than the standard 65W adapter.

#### Key benefits:

- Provides a convenient and portable power source for use in a mobile environment
- Includes a convenient USB port for charging other accessories while you work
- Offers four international adapter plugs (U.S., EU, Japan, and UK) for usage almost anywhere in the world
- A stylish protective carrying case keeps everything together

<b>HP 65W Smart Travel AC Adapter (JOE43AA)</b>	<b>Dimensions</b>	4.72 x 2.28 x 0.67 in (120 x 58 x 17 mm)	
	<b>Weight</b>	0.49 lb (222.6 g)	
	<b>Input</b>		100 to 240 VAC
		<b>Input efficiency</b>	83% min at 115 VAC
	<b>Output</b>	<b>Input frequency range</b>	47 to 63 Hz
		<b>Input AC current</b>	1.7 A at 90 VAC, 0.85 A at 180 VAC
		<b>Output power</b>	65W
		<b>DC output</b>	19.5V 5.0V
		<b>Hold-up time</b>	5 msec at 115 VAC input
		<b>Output current limit</b>	<5A, Over voltage protection- 29V max automatic shutdown
		<b>Connector</b>	3 pin/grounded, mates with interchangeable cords
	<b>Environmental design</b>	<b>Operating temperature</b>	32° to 104° F (0° to 40° C)
		<b>Non-operating (storage) temperature</b>	-4° to 149° F (-20° to 65° C)
		<b>Altitude</b>	0 to 10,000 ft (0 to 3,048 m)
		<b>Humidity</b>	20% to 80%
		<b>Storage humidity</b>	10% to 90%
	<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.	
	<b>Option kit contents</b>	HP Slim Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable cable, AC power cord, US/Japan/EU/UK duck heads, documentation, quick setup poster, warranty, and carrying case.	

### Technical Specifications

#### HP Combo Adapters

HP 90W Combo Adapters are designed for mobile workers who need an adapter while traveling in the car or by air.

<b>HP 90W Slim Combo Adapter with USB detachable DC cable + tips</b> (H6Y84AA)	<b>Dimensions</b>	5.94 x 2.75 x 1.00 in (151 x 70 x 25 mm)	
	<b>Weight</b>	0.88 lb (400 g)	
	<b>AC input</b>	90 to 264 VAC	
		<b>Input frequency range</b>	47 to 63 Hz
	<b>DC input</b>	10 to 32 VDC	
		<b>Input DC current</b>	12.5 at 10VDC
	<b>Output</b>	<b>Output power</b>	100W
		<b>DC output</b>	19.5V 5V / 2A (USB)
	<b>Environmental design</b>	<b>Operating temperature</b>	32° to 95° F (0° to 35° C)
		<b>Non-operating (storage) temperature</b>	-4° to 185° F (-20° to 85° C)
		<b>Altitude</b>	0 to 19,685 ft (0 to 5,000 m)
		<b>Humidity</b>	20% to 95%
		<b>Storage humidity</b>	5% to 95%
	<b>EMI and safety certifications</b>	Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS, S mark, BSMI, ISC, PSE, PSB and SII.	
<b>Option kit contents</b>	HP 90W Slim Combo Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable DC cable, AC power cord, auto/truck cigarette lighter cable, replacement fuses, quick setup poster, warranty, and carrying case.		

### Technical Specifications

#### HP 15W mUSB Power Adapter

Keep working and charge your HP Chromebook 11 with the compact HP 15W mUSB Power Adapter. Simply connect one end of the adapter to your HP Chromebook 11's mini USB connector, and plug the other end into a standard outlet. The compact size fits easily in your notebook's carrying case. Rest easy with a one-year parts replacement limited warranty

<b>HP 15W mUSB Power Adapter</b> K9Q38AA	<b>Dimensions</b>	3.54 x 1.96 x 1.10 in (90 x 50 x 28 mm)
	<b>Weight</b>	0.227 lb (0.103 kg)
	<b>Output</b>	<p><b>Input efficiency</b> Greater than 76.77% at 115Vac &amp; 230Vac</p> <p><b>Input frequency range</b> 47 – 63 Hz</p> <p><b>Input AC current</b> Shall be less than 0.6 Amperes</p> <p><b>Output power</b> 15.75 WATT</p> <p><b>DC output</b> 5.25V +5.0%/–5.0%</p> <p><b>Hold-up time</b> 3 milliseconds</p> <p><b>Output current limit</b> Maximum at 3.8 Amperes</p>
	<b>Connector</b>	Micro USB (JAE DX4PW05HS1)
	<b>Environmental design</b>	<p><b>Operating temperature</b> 0 to 35°C</p> <p><b>Non-operating (storage) temperature</b> -20 to 85°C.</p> <p><b>Altitude</b> 10,000 feet above sea level</p> <p><b>Humidity</b> 95% Humidity</p> <p><b>Storage humidity</b> 0 to 35°C</p>
	<b>EMI and safety certifications</b>	<p>IEC 61000-4-2</p> <p>BLUE ANGEL</p> <p>NORDIC SWAN (V5.1)</p> <p>CHINA SEPA</p> <p>CHINA CECP (APPLY WITH WHOLE SYSTEM LEVEL)</p> <p>TAIWAN GREEN MARK</p> <p>JAPAN PC GREEN</p> <p>KOREA KOECO</p> <p>ENERGY STARTM 5.2</p> <p>EPEAT</p> <p>UL 60950-1</p>
	<b>Option kit contents</b>	1pcs QSP card, 1pcs Notice card, 1pcs Warranty card, 1pcs Adapter, 1pcs Duck head,

#### HP 45W USB-C Power Adapter

Power and charge your notebook or tablet1 from its USB-C™ port with the HP 45W USB-C™ AC Adapter. Connect one end of the adapter to the USB-C™ port on your device1, and plug the AC head into any available wall outlet. Get a one-year limited warranty. [USB Type-C™ and USB-C™ are trademarks of USB Implementers Forum.](#)

<b>HP 45W USB-C Power Adapter</b> V5Y26AA	<b>Dimensions</b>	66mm x 66mm mm x 28.5 mm
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### Technical Specifications

	<b>Input Efficiency</b>	78.71% min at 115V/230V(option) @5V/2A 87.41% min at 115V/230V(option) @12V/3A 87.73% min at 115V/230V(option) @15V/3A
	<b>Input frequency range</b>	47 to 63 Hz
	<b>Input AC current</b>	1.4 A at 90 VAC and maximum load
<b>Output</b>	<b>Output power</b>	45W max
	<b>DC output</b>	5V/12V/15V
	<b>Hold-up time</b>	5msec at 115 VAC input < 5A
	<b>Output current limit</b>	Over voltage protection: 5V less than 7.25V 12V less than 16.85V 15V less than 20.5V
<b>Connector</b>		3 pin/grounded, mates with type-C connector
<b>Environmental Design</b>	<b>Operating temperature</b>	0° to 35° C
	<b>Non-operating (storage) temperature</b>	-20° to 85° C
	<b>Altitude</b>	0 to 5,000 m
	<b>Humidity</b>	0% to 95%
	<b>Storage Humidity</b>	0% to 95%
<b>Safety Certifications</b>		CE Mark - EMC directives; Worldwide safety standards - IEC60950, EN60950, UL60950, Class1, SELV; Agency approvals - C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCC, NOM-1 NYCE; Reliability - failure rate of less than 0.1% annually within the first three years of operation.

Date of change:	Version 1 to 2		Description of change:
July 16, 2014	From v30 to v31	Changed	Version number to match PB/Concentra
November 11, 2014	From v31 to v32	Added	HP 15W mUSB Power Adapter
December 4, 2014	From v32 to v33	Added	Specs for the HP 15W mUSB Power Adapter and removed products no longer offered.
February 8, 2016	From v33 to v34	Updated	Compatibility for the 45W Smart AC Power adapter (H6Y88AA)
February 29, 2016	From v34 to v35	Added	HP 150W Smart AC Adapter (4.5mm) HP 200W Smart AC Adapter (4.5mm)
March 8, 2016	From v35 to v36	Added	HP 45W USB-C™ AC Adapter
		Deleted	HP 40W Smart AC Adapter HP 90W Smart Auto Adapter HP 90W Slim Combo Adapter with USB HP 230W Smart AC Adapter

### Summary of Changes

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