Overview

Models

| Standard Smart AC Adapters | |
|--|-------------|
| HP 40W Smart AC Adapter | H5W93AA |
| HP 45W Smart AC Adapter (4.5mm) | H6Y88AA |
| HP 65W Smart AC Adapter | ED494AA |
| HP 65W Smart AC Adapter (4.5mm) New! | H6Y89AA |
| HP 90W Smart AC Adapter | ED495AA |
| HP 90W Smart AC Adapter (4.5mm) New! | H6Y90AA |
| HP 230W Smart AC Adapter | AT895AA |
| Slim AC Adapters | |
| HP 65W Slim Adapter | AX727AA |
| HP 65W Slim AC Adapter New! | H6Y82AA |
| HP 90W Slim Adapter | BT796AA |
| HP 90W Slim AC Adapter New! | H6Y83AA |
| HP 150W Smart AC Adapter | AL192AA |
| HP 230W Slim AC Adapter | H1D36AA |
| Mini AC Adapter | |
| HP Mini 40W Smart AC Adapter | BU203AA |
| Specialized Travel Adapters | |
| HP Smart 65W Travel AC Adapter | AU155AA |
| HP 90W Smart Auto Adapter | ED493AA |
| HP 90W Slim Combo Adapter with USB | H4A41AA |
| HP 90W Slim Combo Adapter with USB New! | H6Y84AA |
| HP 90W Universal Adapter with USB (US only) | H4A43AA#ABA |
| | |

Introduction

HP includes a high quality AC adapter with each HP Business Notebook, HP Ultrabook, HP Mini 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.

| Compatibility | |
|---|--|
| Adapter | Compatible HP Business Notebooks |
| Standard Smart AC Adapters | |
| HP 40W Smart AC Adapter (H5W93AA) | HP ElitePad Docking Station |
| HP 45W Smart AC Adapter (4.5mm) (H6Y88AA) | HP Spectre 13 Pro, HP Spectre x2 Pro, HP EliteBook Folio 1040, HP EliteBook 8XX, Folio 9470m, Revolve 810, HP 215, 240 G2, 245 G2, 250 G2, 255 G2 Notebook PCs |
| HP 65W Smart AC Adapter (ED494AA) | 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, |



| Overview | |
|---|---|
| | 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 65W Smart AC Adapter (4.5mm) (H6Y89AA) <i>New!</i> | 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 (ED495AA) | 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 90W Smart AC Adapter (4.5mm) (H6Y90AA) New! | 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 230W Smart AC Adapter (AT895AA) | HP Zbook 15, 17, EliteBook 8570w, 8770w, 8560w, 8760w, 8540w, and 8740w Mobile Workstations |
| Slim AC Adapters | |
| HP 65W Slim Adapter (AX727AA) | 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 |
| HP 65W Slim AC Adapter (H6Y82AA) <i>New!</i> | 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 |



| Overview | |
|---|--|
| | 655 Notebook PCs, HP mt20, mt40, mt41, and HP ProBook 6360t Thin Clients |
| HP 90W Slim Adapter (BT796AA) | 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 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 90W Slim AC Adapter (H6Y83AA) <i>New!</i> | 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 |
| Mini AC Adapter HP Mini 40W Smart AC Adapter (BU203AA) | HP Mini 100e, 1XXX, 2XXX, and 5XXX |
| Specialized Travel Adapters HP Smart 65W Travel AC Adapter (AU155AA) | 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 |
| HP 90W Smart Auto Adapter (ED493AA) | HP ProBook Notebook PCs, HP EliteBook 8XX, 2XXXp, and 8XXXp, Folio 9470m, Revolve 810 Notebook PCs, HP EliteBook 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 |
| 90W Slim Combo Adapter with USB (H4A41AA) | 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™, |



| Overview | |
|---|--|
| | 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 |
| 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 |
| HP 90W Universal Adapter with USB (H4A43AA#ABA; US only) | All HP Notebooks with 7.4mm connector barrel, plus notebooks by Acer, Asus, Compaq, Dell, Fujitsu, Lenovo, Samsung, Sony, and Toshiba. |

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.



HP Smart AC Adapters

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
- Available in 65-watt, 90-watt, and 230-watt designs to enable optimum system performance

| | HP 40W Smart AC Adapter (H5W93AA) | HP 45W Smart AC Adapter (H6Y88AA) |
|--|---|---|
| Dimensions | 3.67 x 1.57 x 1.18 in (93 x 40 x 30 mm) | 3.77 x 1.95 x .88 in (96 x 49.5 x 22.4 mm) |
| Weight | 8.64 oz (245 g) | 7.09 oz (201 g) |
| Input | 90 to 265 VAC | 90 to 265 VAC |
| Input Efficiency | 84% min at 115 VAC | 87% min at 115 VAC |
| Input frequency range | 47 to | 63 Hz |
| Input AC current | 1.0 A at 90 VAC | 1.4 A at 90 VAC |
| | Output | |
| Output power | 40W | 45W |
| DC output | 9.50V | |
| Hold-up time | 5 msec at 115 VAC input | |
| Output current limit | 5A | 8A |
| Connector | HP 7.4mm Smart Barrel | HP 4.5mm Smart Barrel |
| | Environmental design | |
| Operating temperature | 41° to 95° F (5° to 35° C) | 41° to 95° F (5° to 35° C) |
| Non-operating (storage) temperature | -4° to 185° F (-20° to 85° C) | -4° to 185° F (-20° to 85° C) |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| Humidity | Up to 95% | Up to 95% |
| Storage humidity | Up to 95% | Up to 95% |
| EMI and safety certifications | 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 | |
| Option kit contents | HP 40W Smart AC Adapter, power cord, warranty booklet | HP 45W Smart AC Adapter, 4.5mm to 7.4mm power DC dongle, power cord, warranty booklet |



HP Smart AC Adapters

| | HP 65W Smart AC Adapter (ED494AA) | HP 65W Smart AC Adapter (H6Y89AA) New! |
|--|--|---|
| Dimensions | 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) |
| Weight | 0.62 lb (280 g) | 0.62 lb (280 g) |
| Input | 90 to 265 VAC | 90 to 265 VAC |
| Input Efficiency | 84% min at 115 VAC | 84% min at 115 VAC |
| Input frequency range | 47 to | 63 Hz |
| Input AC current | 1.7 A at 90 VAC, 0.85 A at 180 VAC | 1.7 A at 90 VAC, 0.85 A at 180 VAC |
| | Output | |
| Output power | 65W | 65W |
| DC output | 18.5V | 18.5V |
| Hold-up time | 5 msec at 115 VAC input | |
| Output current limit | <5A, Over voltage protection- 29V max automatic shutdown | <5A, Over voltage protection- 29V max automatic shutdown |
| Connector | HP 7.4mm Smart Barrel | HP 4.5mm Smart Barrel |
| | Environmental design | • |
| Operating temperature | 41° to 95° F (5° to 35° C) | 41° to 95° F (5° to 35° C) |
| Non-operating (storage) temperature | -4° to 185° F (-20° to 85° C) | -4° to 185° F (-20° to 85° C) |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| Humidity | Up to 95% | Up to 95% |
| Storage humidity | Up to 95% | Up to 95% |
| EMI and safety certifications | 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. | |
| Option kit contents | 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 |

| | HP 90W Smart AC Adapter (ED495AA) | HP 90W Smart AC Adapter (H6Y90AA) New! |
|-----------------------|---|---|
| Dimensions | 5.00 x 1.97 x 1.1 in (127 x 50 x 29 mm) | 5.00 x 1.97 x 1.1 in (127 x 50 x 29 mm) |
| Weight | 0.82 lb (370 g) | 0.82 lb (370 g) |
| Input | 100 to 240 VAC | |
| Input Efficiency | 83% min at 115 VAC | |
| Input frequency range | 47 to 63 Hz | |
| Input AC current | 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 | 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 |
| Output power | 90W | 90W |
| DC output | 19.0V | 19.0V |
| Hold-up time | 5 msec at 115 VAC input | |
| Output current limit | <11A, Over voltage protection- 29V max automatic shutdown | <11A, Over voltage protection- 29V max automatic shutdown |
| Connector | HP 7.4 mm Smart Barrel | HP 4.5 mm Smart Barrel |

HP Smart AC Adapters

| | Environmental design | |
|--|--|---|
| Operating temperature | 32° to 104° F | (0° to 40° C) |
| Non-operating (storage) temperature | | (-20° to 65° C) |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| Humidity | 20% to 80% | |
| Storage humidity | 10% to 90% | |
| EMI and safety certifications | 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. | |
| Option kit contents | HP 90W Smart AC Adapter, power cable, 90W non-Smart dongle, warranty booklet | HP 90W Smart AC Adapter, 4.5mm to 7.4mm power DC dongle, power cord, warranty booklet |

| | HP 230W Smart AC Adapter | |
|--|--|--|
| | (AT895AA) | |
| Dimensions | 7.87 x 3.94 x 1.69 in | |
| w/o DC cable | (200 x 100 x 43 mm) | |
| Weight | 2.8 lb (1,270 g) | |
| Input | 100 to 240 VAC | |
| Input Efficiency | 83% min at 115 VAC | |
| Input frequency range | 47 to 63 Hz | |
| Input AC current | 3.5 A at 90 VAC, 1.75 A at 180 VAC | |
| | Output | |
| Output power | 230W | |
| DC output | 19.50V | |
| Hold-up time | 5 msec at 115 VAC input | |
| Output current limit | <18A; Over voltage protection- 29V max automatic shutdown | |
| Connector | HP 7.4mm Smart Barrel | |
| | Environmental design | |
| Operating temperature | 32° to 104° F (0° to 40° C) | |
| Non-operating (storage) temperature | -4° to 149° F (-20° to 65° C) | |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| Humidity | 20% to 80% | |
| Storage humidity | 10% to 90% | |
| EMI and safety certifications | 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. | |
| Option kit contents | HP 230W Smart AC Adapter, power cable, warranty booklet | |



HP Slim Adapters

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
- 65- and 90-watt versions include a convenient USB port for charging other accessories while you work

| | HP 65W Slim Adapter | HP 65W Slim AC Adapter |
|----------------------------------|---|---|
| | (AX727AA) | (H6Y82AA) New! |
| Dimensions | 4.72 x 2.28 x 0.67 in | 4.72 x 2.28 x 0.67 in |
| w/o DC cable | (120 x 58 x 17 mm) | (120 x 58 x 17 mm) |
| Weight | 0.49 lb (222.6 g) | 0.49 lb (222.6 g) |
| Input | 100 to 240 VAC | 100 to 240 VAC |
| Input efficiency | 83% min at 115 VAC | 83% min at 115 VAC |
| Input frequency range | 47 to | 63 Hz |
| Input AC current | <1.7 A at 90 VAC | <1.7 A at 90 VAC |
| | Output | |
| Output power | 65W | 65W |
| DC output | 19.50V +5 | .0%/-5.0% |
| Hold-up time | 5 msec at 11 | 15 VAC input |
| Output current limit | <11A, Over voltage protection- 29V max automatic shutdown | <11A, Over voltage protection- 29V max automatic shutdown |
| Connector | 3 pin/grounded, mates with interchangeable cords | |
| | Environmental design | |
| Operating temperature | 32° to 104° F (0° to 40° C) | 32° to 104° F (0° to 40° C) |
| Non-operating | -4° to 149° F (-20° to 65° C) | -4° to 149° F (-20° to 65° C) |
| (storage) temperature | | |
| Altitude | 0 to 10,000 ft | (0 to 3,048 m) |
| Humidity | 20% to 80% | 20% to 80% |
| Storage humidity | 10% to 90% | 10% to 90% |
| EMI and safety certifications | 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. | |
| Option kit contents | HP Slim Adapter, Smart power connector cable, Ultrabook™ connector cable, AC power cord, documentation, quick setup poster and warranty | HP Slim Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable cable, AC power cord, documentation, quick setup poster and warranty |



HP Slim Adapters

| | HP 90W Slim Adapter (BT796AA) | HP 90W Slim AC Adapter (H6Y83AA) New! |
|--|---|---|
| Dimensions w/o DC cable | 5.43 x 2.28 x 0.67 in (138 x 58 x 17 mm) | 5.43 x 2.28 x 0.67 in (138 x 58 x 17 mm) |
| Weight | 0.49 lb (222.6 g) | 0.49 lb (222.6 g) |
| Input | 100 to 240 VAC | 100 to 240 VAC |
| Input efficiency | 87% min at 115 VAC | 87% min at 115 VAC |
| Input frequency range | 47 to 63 Hz | |
| Input AC current | <1.6 A at 90 VAC | <1.6 A at 90 VAC |
| | Output | |
| Output power | 90W | 90W |
| DC output | 19.50V +5.0%/-5.0% | |
| Hold-up time | 5 msec at 115 VAC input | |
| Output current limit | <11A, Over voltage protection- 29V max automatic shutdown | <11A, Over voltage protection- 29V max automatic shutdown |
| Connector | 3 pin/grounded, mates with interchangeable cords | |
| | Environmental design | |
| Operating temperature | 32° to 104° F (0° to 40° C) | |
| Non-operating (storage) temperature | -4° to 149° F (-20° to 65° C) | |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| Humidity | 20% to 80% | |
| Storage humidity | 10% to 90% | |
| EMI and safety certifications | 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. | |
| Option kit contents | HP Slim Adapter, Smart power connector cable, Ultrabook™ connector cable, AC power cord, documentation, quick setup poster and warranty | HP Slim Adapter, DC connector tips (4.5mm/7.4mm Smart, Ultrabook™), detachable cable, AC power cord, documentation, quick setup poster and warranty |

| | HP 150W Smart AC Adapter (AL192AA) | HP 230W Smart AC Adapter (H1D36AA) | |
|----------------------------|--|---|--|
| Dimensions 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) | |
| Weight | 1.61 lb (730.3 g) | 1.79 lb (811.9 g) | |
| Input | 90 to 265 VAC | 90 to 265 VAC | |
| Input efficiency | 87% min at 115 VAC | 87% min at 115 VAC | |
| Input frequency range | 47 to 63 Hz | | |
| Input AC current | <2.7 A at 90 VAC | <3.5 A at 90 VAC | |
| | Output | | |
| Output power | 150W 230W | | |
| DC output | 19.50V +5.0%/-5.0% | | |
| Hold-up time | 5 msec at 115 VAC input | | |
| Output current limit | <15A, Over voltage protection- 29V max automatic shutdown automatic shutdown | | |
| Connector | HP 7.4mm Smart Barrel | | |



HP Slim Adapters

| | Environmental design | | |
|--|--|--|--|
| Operating temperature | 41° to 95° F (5° to 35° C) | | |
| Non-operating (storage) temperature | -4° to 185° F (-20° to 85° C) | | |
| Altitude | 0 to 10,000 ft (0 to 3,048 m) | | |
| Humidity | 10% to 95% | | |
| Storage humidity | 10% to 95% | | |
| EMI and safety certifications | , | g CE, UL, CSA or cUL, GS, Australian Electric ABS, S mark, BSMI, ISC, PSE, PSB and SII. | |
| Option kit contents | HP Smart AC Adapter, AC power cord, documentation, quick setup poster and warranty | | |



HP Mini Adapters

HP Mini Adapter

The HP Mini 40W AC Adapter is the AC power adapter designed for use with select models of the HP Mini series of products. Sturdy and lightweight, the adapter is built with the same industry standard specification as the HP Smart AC Adapters that come with HP Business Notebooks and HP Docking stations.

- Add an extra power adapter and always have one available at home or in the office
- Light weight for easy transport when you're on the go
- Built in surge protection helps to guard your PC

| HP Mini 40W Adapter (BU203AA) | Dimensions Weight Input | 3.67 x 1.57 x 1.12 in (93 x 40 x 28.5 mm) 0.44 lb (200g) 90 to 265 VAC | | |
|---|----------------------------------|--|---|--|
| | | Input efficiency | 84% min at 115 VAC | |
| | | Input frequency range | 47 to 63 Hz | |
| | | Input AC current | 1.1 A at 90 VAC | |
| | Output | Output power | 40W | |
| | | DC output | 19.5V | |
| | | Hold-up time | 5 msec at 115 VAC input | |
| | | Output current limit | <5A, Over voltage protection- 29V max automatic shutdown | |
| | Connector | 3 pin/grounded, mates with interchangeable cords | | |
| | Environmental design | gn Operating temperature 41° to 95° F (5° to 35° C) | | |
| | | Non-operating (storage) temperature | -4° to 185° F (-20° to 85° C) | |
| | | Operating altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| | | Non-operating altitude | 0 to 50,000 ft (0 to 15,240 m) | |
| | | Humidity | Up to 95% | |
| | | Storage humidity | Up to 95% | |
| | EMI and safety certifications | Worldwide safety and EMC approvals including CE, UL, CSA or cUL, GS, Australian Electric Permit, C-tick, NOM, CCC, KC, GOST, SABS mark, BSMI, ISC, PSE, PSB and SII. | | |
| Option kit contents HP Mini 40W Adapter, power cable, warranty book | | ower cable, warranty booklet | | |



HP Smart Travel AC Adapters

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

| HP Smart 65W Travel | Dimensions | 4.72 x 2.28 x 0.67 in (120 x 58 x 17 mm) | | |
|----------------------|-------------------------------|--|---|--|
| AC Adapter (AU155AA) | Weight | 0.49 lb (222.6 g) | | |
| | Input | 100 to 240 VAC | | |
| | | Input efficiency | 83% min at 115 VAC | |
| | | Input frequency range | 47 to 63 Hz | |
| | | Input AC current | 1.7 A at 90 VAC, 0.85 A at 180 VAC | |
| | Output | Output power | 65W | |
| | | DC output | 19.5V 5.0V | |
| | | Hold-up time | 5 msec at 115 VAC input | |
| | | Output current limit | <5A, Over voltage protection- 29V max automatic shutdown | |
| | Connector | 3 pin/grounded, mates with interchangeable cords | | |
| | Environmental design | Operating temperature 32° to 104° F (0° to 40° C) | | |
| | | Non-operating (storage) temperature | -4° to 149° F (-20° to 65° C) | |
| | | Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| | | Humidity | 20% to 80% | |
| | | Storage humidity | 10% to 90% | |
| | EMI and safety certifications | 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. | | |
| | Option kit contents | HP Smart 65W Travel AC Adapter, Smart power connector cable, Ultrabook™ connector cable, AC power cord, US/Japan/EU/UK duck heads, documentation, quick setup poster, warranty, and carrying case. | | |



HP Combo Adapters

HP Combo Adapters

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

HP 90W Slim Combo Adapter with USB

The HP 90W Slim Combo Adapter with USB can power up your notebook at home/office, in your car, or on the aircraft of any airline.

Key benefits:

- Powers your notebook when attached to an electrical outlet, or a power charger on automobile or aircraft
- Equipped with an automobile cigarette lighter connection cable that works in both 12V and 24V auto power chargers
- An integrated 2.0A USB port enables charging of tablets, phones or various mobile devices
- Interchangeable cabling supports cross range of HP Notebooks and Ultrabooks[™]

HP 90W Smart Auto Adapter

The HP 90W Smart Auto Adapter is designed to power your HP notebook in your car and charge the internal battery simultaneously. It works in both 12V and 24V automobile power chargers.

Key benefits:

- Provides a convenient and portable power source for use in a mobile environment
- · Equipped with an adapter plug that works in the socket of most cars

| HP 90W Smart | Dimensions | 6.65 x 2.56 x 1.50 in (169 x 65 x 38 mm) | | |
|---------------------------|----------------------------------|---|-------------------------------|--|
| Auto Adapter (ED493AA) | Weight | 1.1 lb (500 g) | | |
| | Input | 10 to 32 VDC | | |
| | | Input efficiency | 83% min at 15 VDC | |
| | | Input DC current | 11 A at 10 VDC | |
| | Output | Output power | 90W | |
| | | DC output | 19.0V | |
| | | Output current limit | | |
| | Connector | DC: Cigarette/Air | | |
| | Environmental design | Operating temperature 32° to 95° F (0° to 35° C) | | |
| | | Non-operating (storage) temperature | -4° to 149° F (-20° to 65° C) | |
| | | Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| | | Humidity | 20% to 80% | |
| | | Storage humidity | 10% to 90% | |
| | EMI and safety certifications | 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. | | |
| | Option kit contents | HP 90W Smart Auto Adapter, power cable, 90W non-Smart dongle, warranty booklet | | |



| HP Combo Adapters | | | | |
|--|----------------------------------|--|---|--|
| HP 90W Slim Combo Adapter with USB detachable DC cable + | Dimensions Weight AC input | 5.94 x 2.75 x 1.00 in (151 x 70 x 25 mm) 0.88 lb (400 g) 90 to 264 VAC | | |
| tips (H6Y84AA) | | Input frequency range | 47 to 63 Hz | |
| | DC input | 10 to 32 VDC | | |
| | 0 | Input DC current | 12.5 at 10VDC | |
| | Output | Output power | 100W | |
| | | DC output | 19.5V 5V / 2A (USB) | |
| | Environmental design | Operating temperature | 23° to 95° F (0° to 35° C) | |
| | Environmental design | Non-operating | -4° to 185° F (-20° to 85° C) | |
| | | (storage) temperature | , , , , , , , , , , , , , , , , , , , | |
| | | Altitude | 0 to 19,685 ft (0 to 5,000 m) | |
| | | Humidity | 20% to 95% | |
| | | Storage humidity | 5% to 95% | |
| | EMI and safety certifications | , | IC approvals including CE, UL, CSA or cUL, Permit, C-tick, NOM, CCC, KC, GOST, SABS, S PSB and SII. | |
| | Option kit contents | 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. | | |
| HP 90W Slim Combo | Dimensions | 5.94 x 2.75 x 1.00 in (15 | 1 x 70 x 25 mm) | |
| Adapter with USB | Weight | 0.88 lb (400 g) | | |
| (H4A41AA) | AC input | 90 to 264 VAC | | |
| | · | Input frequency range 47 to 63 Hz | | |
| | DC input | 10 to 32 VDC | | |
| | | Input DC current | 12.5 at 10VDC | |
| | Output | Output power | 100W | |
| | | DC output | 19.5V | |
| | | · | 5V / 2A (USB) | |
| | Environmental design | Operating temperature | e 32° to 95° F (0° to 35° C) | |
| | | Non-operating (storage) temperature | -4° to 185° F (-20° to 85° C) | |
| | | Altitude | 0 to 19,685 ft (0 to 5,000 m) | |
| | | Humidity | 20% to 95% | |
| | | Storage humidity | 5% to 95% | |
| | EMI and safety certifications | <u>,</u> | IC approvals including CE, UL, CSA or cUL, Permit, C-tick, NOM, CCC, KC, GOST, SABS, S PSB and SII. | |
| | Option kit contents | HP 90W Slim Combo Adapter, AC power cord, auto/truck cigarette lighter cable, detachable DC cables (2), replacement fuses, quick setup poster and warranty. | | |

HP Universal Adapter

HP Universal Adapter

The HP Universal 90W USB Adapter is a multi-brand compatible power adapter designed to work with virtually every brand of laptop, and includes 12 interchangeable tips for easy connectivity.

Key benefits:

- Built-in USB port allows charging of tablets and various mobile devices
- Vigorous testing standards for strict quality control and compatibility
- Built-in surge protection and third prong for grounding
- Increased flexibility for use with multiple notebooks at home, in the office, or on the road

Technical Specifications

| HP 90W Universal Adapter with USB (H4A43AA#ABA; US | Dimensions Weight Input | 5.51 x 2.17 x 1.22 in (140.5 x 55 x 31 mm) 0.88 lb (400 g) 100 to 240 VAC | | |
|--|-------------------------------|--|---------------------------------|--|
| only) | | Input efficiency | 83% min at 115 VAC | |
| | | Input frequency range | 50 to 60 Hz | |
| | | Input AC current | 1.8 A at 90 VAC | |
| | Output | Output power | 100W | |
| | | DC output | 19.5V (DC); 5V (USB) | |
| | | Hold-up time | 5 msec at 115 VAC/240 VAC input | |
| | | Output current limit | <11A (DC), < 4.5A (USB) | |
| | Connector | 3-pin/grounded, mates with interchangeable cords | | |
| | Environmental design | Operating temperature | 22° to 95° F (5° to 35° C) | |
| | | Non-operating (storage) temperature | -4° to 149° F (-20° to 85° C) | |
| | | Altitude | 0 to 10,000 ft (0 to 3,048 m) | |
| | | Humidity | Up to 95% | |
| | | Storage humidity | Up to 95% | |
| | EMI and safety certifications | Worldwide safety and EMC approvals including CE, UL, CSA, GS, Argentina, Australia, C-TICK, NOM, CCC, KC, GOST, SABS, S mark BSMI, ISC, PSE, PSB and SII | | |
| | Option kit contents | HP Universal 90W USB Adapter, 12 DC connector tips, AC power cord, Quick Setup Guide, warranty booklet | | |

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