Overview

mHP Smart Adapters for HP Business Notebooks

Models

HP 65W Smart AC Adapter	ED494AA#xxx
HP 90W Smart AC Adapter	ED495AA#xxx
HP 135W Smart AC Adapter	ED519AA#xxx
HP 65W Smart AC/Auto/Air Combo Adapter	ED993AA#xxx

Introduction

HP offers a broad assortment of power solutions to help you get the most out of your HP Business Notebooks, including new Smart Adapters that are both energy efficient and convenient as they can be leveraged across multiple notebook families. Smart Adapters can enhance your productivity by powering your notebook while plugged in, as well as charging your battery so that you can take your notebook with you when you unplug. HP Smart Adapters also feature integrated surge protection to protect against power fluctuations that can damage your notebook. HP Smart Adapters help you save on equipment, power consumption costs and travel weight.

HP's new Smart adapters enable a new level of compatibility across the HP Business Notebook lineup providing a worry-free user experience. HP's Smart adapter option kits include a "legacy dongle" so that they are backwards compatible with older HP notebooks, providing an unprecedented level of commonality. Customers wanting one common AC adapter for all their HP Business Notebooks and docking stations can use the new HP 135W Smart AC adapter.

The HP 65W AC/Auto/Air Combo Smart Adapter allows you to power and charge your notebook while in the office, at home, or in the car, and offers you the additional capability of powering your notebook on any airplane. The convenient "charging switch" allows you to toggle between charging and power-only voltage levels so you can charge your battery while in the office or in the car, and power while on an aircraft.

Key Benefits

- Provides a convenient and portable power source for use in a mobile environment
- Shared across all HP Business Notebooks for a convenient, worry-free experience
- Energy-efficient power adapters designed to draw minimal power
- Integrated surge protector to guard against power fluctuations
- 65-watt, 90-watt and 135-watt Smart AC adapter design enables optimum system performance
- Recharges notebook battery when attached to electrical outlet and/or automobile power charger (depending on model)
- Compact design makes HP Smart Adapters an ideal travel companion

Compatibility

HP Smart Adapters are compatible with all HP Business Notebooks and Tablet PCs except for the nx9000, nx9100, nx9500 and nx9600 series notebooks.

- 65W Smart AC Adapter is optimized for 65W notebooks.
- 90W Smart AC Adapter is optimized for 90W notebooks.
- 135W Smart AC Adapter is optimized for 120W notebooks and higher, as well as for basic and advanced docking

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stations.

NOTE: Included dongle must be used for compatibility with legacy HP Business Notebooks and Tablet PCs.

Service and Support

The warranty period for HP Business Notebook batteries 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 65W Smart AC Adapter	Spares #391172-001
HP 90W Smart AC Adapter	Spares #391173-001
HP 135W Smart AC Adapter	Spares # 397803-001
HP 65W AC/Auto/Air Combo Smart Adapter	Spares #403706-001

QuickSpecs

Technical Specifications

HP 65W Smart AC Adapter	Dimensions	4.17 x 1.85 x 1.1 in (10.6 x 4.7 x 2.8 cm)	
	Weight	0.62 lb (280 g)	
	Input	Nominal 12 or 24 VDC (10 to 32 VDC)	
		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	65W
		DC output	18.5V
		Hold-up time	5 msec at 115 VAC input
		Output current limit	<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	CE Mark – full compliance with LVD and EMC directives; Worldwide safety standards – IEC950, EN60950, UL1950, Class2, SELV; Agency approvals – C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCIB, NOM-1 NYCE; MTBF – over 200,000 hours at 25°C ambient condition.	
	Option Kit Contents	65W AC Adapter, power cable, legacy platform dongle, warranty booklet	

HP 90W Smart AC Adapter	Dimensions	5.24 x 2.28 x 1.1 in (13.3 x 5.8 x 2.9 cm)	
	Weight	0.86 lb (390 g)	
	Input	Nominal 12 or 24 VDC (10 to 32 VDC)	
		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
	Output	Output power 65W	90W
		DC output	18.5V
		Hold-up time	5 msec at 115 VAC input
		Output current limit	<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)

Technical Specifications

		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	CE Mark – full compliance with LVD and EMC directives; Worldwide safety standards – IEC950, EN60950, UL1950, Class2, SELV; Agency approvals – C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCIB, NOM-1 NYCE; MTBF– over 200,000 hours at 25°C ambient condition.	
	Option Kit Contents	90W AC Adapter, power cable, legacy platform dongle, warranty booklet	

HP 135W Smart AC Adapter	Dimensions	6.65 x 2.56 x 1.5 in (16.9 x 6.5 x 3.8 cm)	
	Weight	1.54 lb (700 g)	
	Input	100 to 240 VAC	
		Input Efficiency	83% min at 115 VAC
		Input frequency range	47 to 63 Hz
		Input AC current	2.2 A at 90 VAC, 1.1 A at 180 VAC NON PFC Version
	Output	Output power 65W	135W
		DC output	19.0V
		Hold-up time	5 msec at 115 VAC input
		Output current limit	<18A, Over voltage protection- 29V max automatic shutdown
	Connector	3 pin/grounded, mates with interchangeable cords	
	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	CE Mark – full compliance with LVD and 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; MTBF – over 200,000 hours at 25°C ambient condition.	
	Option Kit Contents	135W AC Adapter, power cable, warranty booklet	

HP Smart 65W AC/Auto/Air Combo Adapter	Dimensions	5.7 x 2.4 x 1.2 in (14.5 x 6.2 x 3.1 cm)
	Weight	1.0 lb (480 g)
	AC Input	100 to 240 VAC

Technical Specifications

	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
DC Input	10 to 32 VDC	
	Input Efficiency	83% min at 15 VDC
	Input DC current	8 A at 10 VDC
Output	Output power	65W
	DC output	18.5V Charge Mode 15.0V Non-Charge Mode
	Hold-up time	5 msec at 115 VAC input
	Output current limit	<11A, Over voltage protection- 29V max automatic shutdown
Connector	AC: 3 pin/grounded, mates with interchangeable cords DC: Cigarette/Air	
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	CE Mark – full compliance with LVD and EMC directives; Worldwide safety standards – IEC950, EN60950, UL1950, Class2, SELV; Agency approvals – C-UL-US, NORDICS, DENAN, EN55022 Class B, FCC Class B, CISPR22 Class B, CCIB, NOM-1 NYCE; MTBF – over 200,000 hours at 25°C ambient condition.	
Option Kit Contents	65W Combo Adapter, AC power cord, auto/air cable, legacy platform dongle, quick setup poster and warranty.	