

1 Product description

This table provides detailed product information.

Table 1-1 Product components and their descriptions

Category	Description
Product Name	HP ProBook 450 G8 Notebook PC
Processors	Intel® processors - Intel Core® i7-1185G7 (3.0 GHz, 4 cores, 3200 MHz, 12 MB L3 cache, 15 W) - Intel Core® i7-1165G7 (2.8 GHz, 4 cores, 3200 MHz, 12 MB L3 cache, 15 W) - Intel Core i5-1135G7 (2.4 GHz, 4 cores, 3200 MHz, 8 MB L3 cache, 15 W) - Intel Core i3-1115G7 (3.0 GHz, 2 cores, 3200 MHz, 6 MB L3 cache, 15 W)
Graphics	Internal graphics - Intel Iris® Xe Graphics Discrete graphics - NVIDIA® GeForce® MX450 graphics - Supports CUDA, Optimus™, PhysX, GPU Boost 2.0 - Supports HD Decode, DX12, and HDMI 1.4b, HDCP 2.3 via DisplayPort up to 4 K @ 60 Hz - Supports maximum of three independent displays when on the HP USB-C Dock G4; Max resolution = 4 K @ 30 Hz (DisplayPort 1 and DisplayPort 2) - Supports maximum of three independent displays when on the HP Thunderbolt™ Dock 120 W G2 (through USB-C); Max resolution = 4 K @ 30 Hz (DisplayPort 1 and DisplayPort 2)
Display	39.6 cm (15.6 in), full high definition (FHD) (1920 × 1080), UWVA, narrow bezel, antiglare, bent 250 nits, 45% CG, eDP 1.2 without PSR, no camera 250 nits, 45% CG, eDP 1.2 without PSR, HD camera 250 nits, 45% CG, eDP 1.2 without PSR, HD + IR camera 250 nits, 45% CG, eDP 1.2 without PSR, HD camera, WWAN models 250 nits, 45% CG, eDP 1.2 without PSR, HD camera, Touch-on Panel (TOP) 250 nits, 45% CG, eDP 1.2 without PSR, HD camera, Touch-on Panel (TOP), WWAN models 400 nits, sRGB 100, eDP, low power, HD camera 400 nits, sRGB 100, eDP, low power, HD + IR camera 1000 nits, 72% CG, eDP 1.4 + PSR2, SVG3, HD + IR camera 1000 nits, 72% CG, eDP 1.4 + PSR2, SVG3, HD camera High definition (HD) (1366 × 768), SVA, narrow bezel, antiglare, bent 250 nits, 45% CG, eDP 1.2 without PSR, no camera

Table 1-1 Product components and their descriptions (continued)

Category	Description
	250 nits, 45% CG, eDP 1.2 without PSR, HD camera
	250 nits, 45% CG, eDP 1.2 without PSR, HD + IR camera
	250 nits, 45% CG, eDP 1.2 without PSR, HD camera, WWAN models
Memory	Two customer-accessible memory module slots supporting up to 32 GB of RAM
	DDR4-3200 dual-channel support
	Supports the following configurations:
	32 GB (16 × 2)
	16 GB (8 × 2) or (16 × 1)
	12 GB (8 + 4)
	8 GB (8 × 1 or 4 × 2)
Primary storage	M.2 2280 solid-state drives, PCIe, NVMe
	1 TB, PCIe, Gen3 × 4, TLC
	512 GB, PCIe (Gen3 × 2 × 2) + 32 GB Optane™ memory module
	512 GB, PCIe, value
	256 GB, PCIe, value
	128 GB, PCIe, Gen3 × 2, TLC
Audio and video	HP Audio Control
	Stereo speakers (2)
	Microphone (dual-array)
	Camera, HD 720p (select products only)
	Camera, HD 720p + IR (infrared) (select products only)
	Supports WDR (Wide Dynamic Range)
RJ-45 (network) jack	Realtek RTL8111HSH-CG 10/100/1000
	The following support S4/S5 wake on LAN (via out of band) and S0/S3/S4/S5 MPAT (via out of band): HP Docking Station, HP USB-C Mini Dock, HP USB-C/A Universal Dock G2, HP USB-C Dock G5, HP Thunderbolt Dock 120 W G2.
Wireless	Wireless Local Area Network (WLAN) (select products only)
	Intel Wireless-AC 9560 802.11ac 2 × 2 Wi-Fi + Bluetooth® 5 (MU-MIMO supported)
	Intel Wi-Fi 6 AX201 + Bluetooth 5 (non-vPro) (802.11ax 2 × 2, MU-MIMO, supporting gigabit file transfer speeds)
	Realtek RTL8822BE 802.11ac/abgn 2 × 2 + Bluetooth 5 (MU-MIMO supported)
	Compatible with Miracast® devices
	Two WLAN antennas configured at top of panel
	Supports HP Connection Optimizer (with data analytics)

Table 1-1 Product components and their descriptions (continued)

Category	Description
	Supports Static BIOS SAR for Intel modules and Realtek modules
	Supports HP Extended Range Wireless LAN
	Supports HP LAN-Wireless Protection (WLAN/LAN/WWAN switching)
	Wireless Wide Area Network (WWAN) (select products only)
	Intel XMM™ 7360 LTE-Advanced (Cat 9)
	WWAN antennas (worldwide 5 band, in WWAN panels)
	WWAN cards are compatible with a programmable removable eSIM
Ports	HDMI 1.4b
	Audio-out (headphone)/audio-in (microphone) combo jack
	(3) USB 3.1 Gen 1 Type-A ports
	USB 3.1 Gen 2 Type-C port
	RJ-45 (network) jack
	AC Smart Pin adapter plug, 4.5 mm
Media card reader	microSD™ memory card reader
Sensors	Hall sensor
	Ambient light sensor
Keyboard/pointing devices	Keyboard
	Backlit, spill resistant
	Not backlit, spill resistant
	Backlit, spill resistant, privacy
	Clickpad
	Firmware PTP
	Microsoft® precision touchpad default gestures support
Power requirements	No hybrid mode support
	Battery
	3 cell, 45 Whr, HP Long Life
	HP Fast Charge Technology
	Supports Modern Standby
	Smart AC adapters
	65 W, 4.5 mm
	65 W, right angle, nPFC, 4.5 mm, 1.8 m (6 ft)
	65 W, 7.4 mm,
	65 W, LC, USB Type-C

Table 1-1 Product components and their descriptions (continued)

Category	Description
	65 W, straight, nPFC, USB Type-C, 1.8 m (6 ft)
	65 W, USB Type-C, slim travel adapter
	45 W, 4.5 mm
	45 W, nPFC, right angle
	45 W, 4.5 mm (Japan only)
	45 W, LC, USB Type-C
	45 W, nPFC, USB Type-C, straight
	45 W, nPFC, standard C8 for 2 prong barrel
	Power cord
	C7, 1.0 m (3.3 ft), conventional
	C5, 1.0 m (3.3 ft), conventional
Security	Trusted Platform Module (TPM) 2.0
	Nano cable lock
	Touch fingerprint sensor (select products only)
	HP SureKey Standard/Nano/Wedge Cable Lock
Operating system	Windows® 10 Home 64
	Windows 10 Home 64 Advanced
	Windows 10 Home 64 Advanced Single Language
	Windows 10 Home 64 Chinese Market CPPP
	Windows 10 Home 64 High-End Chinese Market CPPP
	Windows 10 Home 64 Plus
	Windows 10 Home 64 Plus Single Language
	Windows 10 Home 64 Plus Single Language Africa Market PPP
	Windows 10 Home 64 Plus Single Language APAC EM PPP
	Windows 10 Home 64 Plus Single Language India Market PPP
	Windows 10 Home 64 Plus Single Language Indonesia Market PPP
	Windows 10 Home 64 Single Language
	Windows 10 Home 64 Single Language Africa Market PPP
	Windows 10 Home 64 Single Language APAC EM PPP
	Windows 10 Home 64 Single Language India Market PPP
	Windows 10 Home 64 Single Language Indonesia Market PPP
	Windows 10 Home 64 StF MSNA for Higher Education Strategic
	Windows 10 Enterprise 64

Table 1-1 Product components and their descriptions (continued)

Category	Description
	Windows 10 Enterprise 64 LTSC 1809 (RS5)
	Windows 10 Pro 64
	Windows 10 Pro CBB 1909
	Windows 10 Pro 64 Chinese Market
	Windows 10 Pro 64 StF MSNA Plus
	Windows 10 Pro 64 StF MSNA Standard
	Windows 10 Pro 64 StF MSNA Strategic
	FreeDOS 3.0
	Restore media
	Windows 10 Professional 64 bit OS DVD
	Windows 10 Professional 64 bit OS USB
	Certified
	Microsoft WHQL
Serviceability	End user replaceable parts
	AC adapter