**Operating system**

Windows 10 Home 64

Windows 10 Pro 64

**Processor and graphics**

Intel® Core™ i7-8750H (2.2 GHz, up to 4.1 GHz, 9 MB cache, 6 cores) + NVIDIA® GeForce® GTX 1050 (2 GB GDDR5 dedicated)

Intel® Core™ i7-8750H (2.2 GHz, up to 4.1 GHz, 9 MB cache, 6 cores) + NVIDIA® GeForce® GTX 1050Ti (4 GB GDDR5 dedicated)

Intel® Core™ i7-8750H (2.2 GHz, up to 4.1 GHz, 9 MB cache, 6 cores) + NVIDIA® GeForce® GTX 1060 (3 GB GDDR5 dedicated)

Intel® Core™ i7-8750H (2.2 GHz, up to 4.1 GHz, 9 MB cache, 6 cores) + NVIDIA® GeForce® GTX 1060 (6 GB GDDR5 dedicated)

Intel® Core™ i7-8750H (2.2 GHz, up to 4.1 GHz, 9 MB cache, 6 cores) + NVIDIA® GeForce® GTX 1070 (8 GB GDDR5 dedicated)

**Intel® Optane™ memory**

No Optane

16 GB PCIe® NVMe™ Intel® Optane™

**Display**

17.3" diagonal FHD IPS anti-glare WLED-backlit (1920 x 1080)

17.3" diagonal FHD 144 Hz IPS anti-glare WLED-backlit (1920 x 1080) with NVIDIA G-SYNC™ technology

17.3" diagonal 4K IPS anti-glare WLED-backlit (3840 x 2160)

**Memory**

8 GB DDR4-2666 SDRAM (1 x 8 GB)

12 GB DDR4-2666 SDRAM (1 x 4 GB, 1 x 8 GB)

16 GB DDR4-2666 SDRAM (2x8GB)

32 GB DDR4-2666 SDRAM (2x16GB)

**Storage**

1 TB 7200 rpm SATA

1 TB 7200 rpm SATA; 16 GB PCIe® NVMe™ Intel® Optane™

1 TB 7200 rpm SATA; 128 GB PCIe® NVMe™ M.2 SSD

1 TB 7200 rpm SATA; 256 GB PCIe® NVMe™ M.2 SSD

2 TB 5400 rpm SATA; 256 GB PCIe® NVMe™ M.2 SSD

1 TB 7200 rpm SATA; 512 GB PCIe® NVMe™ M.2 SSD

**Office software**

Office Software Trial

Microsoft® Office 365 Personal 1-year - Save $20 instantly

Microsoft® Office 365 Home 1-year - Save $20 instantly

Microsoft® Office Home and Student 2019

Microsoft® Office 2019 Home and Business

Microsoft® Office 2019 Professional

**McAfee LiveSafe(TM) Security Software**

Security Software Trial

McAfee LiveSafe™ 12 months - Save $50 instantly

McAfee LiveSafe™ 24 months - Save $99.99 instantly

McAfee LiveSafe™ 36 months - Save $149.98 instantly

**Theft protection**

Absolute Home & Office, One Year

Absolute Home & Office, Two Year

Absolute Home & Office, Four Year

**Primary battery**

8-cell 82 Wh Lithium-ion Battery

8-cell 86 Wh Lithium-ion Battery

**Keyboard**

Full-size island-style backlit keyboard with numeric keypad

**Personalization**

HP Wide Vision HD Camera with dual array digital microphone

HP Wide Vision FHD IR Camera with dual array digital microphone

HP Wide Vision HD Camera and dual array digital microphone with 1Thunderbolt™ 3

HP Wide Vision FHD IR Camera and dual array digital microphone with 1Thunderbolt™ 3

**Wireless technology**

802.11b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 4.2 combo

Intel® Wireless-AC 9560 802.11b/g/n/ac (2x2) Gigabit Wi-Fi® and Bluetooth® 5 Combo(MU-MIMO supported)

**Audio**

Bang & Olufsen, dual speakers, HP Audio Boost, DTS Headphone:X™ support

**Network interface**

Integrated 10/100/1000 GbE LAN

**Expansion slots**

1 multi-format SD media card reader

**External I/O Ports**

3 USB 3.1 Gen 1 (1 HP Sleep and Charge); 1 Mini DisplayPort™; 1 HDMI v2.0; 1 RJ-45; 1 headphone/microphone combo

**Power supply**

For NVIDIA® GeForce® GTX 1050/1050 Ti models: 150 W AC power adapter; For NVIDIA® GeForce® GTX 1060/1070 models: 230 W AC power adapter

**Energy efficiency**

ENERGY STAR® certified; EPEAT® Silver registered

**Dimensions (W X D X H)**

16.65 x 11.97 x 1.3 in

**Weight**

8.33 lb

**Warranty**

1 year limited hardware warranty (information at www.hp.com/support); 90 day phone support (from date of purchase); complimentary chat support within warranty period (at www.hp.com/go/contacthp)

**Software included**

McAfee LiveSafe™ 30-day trial offer (Internet access required. First 30 days included. Subscription required for live updates afterwards.)

**Security management**

Kensington NanoSaver™ security lock support