



HP mt22 Mobile Thin Client (190W4UT)



Overview

Secure, stylish, and affordable cloud[1] productivity

Get everything you need to work in the cloud[1] with the HP mt22 Mobile Thin Client. It has essential performance features for daily multi-tasking, trusted security, and a sleek, durable aesthetic.

Protect your data, device, and identity

Rest easy with a thin client that has multi-layered security to help keep your cloud computing experience safe with a self-healing BIOS, optional HP Privacy Camera[2] and available ThinPro OS.

Built to be seen, built to last

Get a device that looks sharp in any office setting with a 180° lie-flat, hinge and solid stamped-aluminum chassis that withstands daily wear and tear and undergoes MIL-STD testing[6] for durability and dependability.

Business-class productivity for your virtual or cloud computing workload.[1]

Power through your to-do list with an Intel® Celeron® processor[3] and the enhanced connectivity of optional HP Extended Range Wireless LAN.[2,4] Quickly transition to your desk, displays, and accessories by connecting to an HP USB-C™ dock.[5]

Fast device deployment, simplified management

Make it easy for your IT admins to remotely deploy, update, and manage thousands of HP Mobile Thin Clients from anywhere[1] through a single console with HP Device Manager software, included with HP Thin Clients at no extra cost.

Features

Naturally secure OS

Choose the Linux®-based HP ThinPro for an OS that limits virus threats. It also has a locked file system that deters unauthorized updates, a built-in firewall, and customizable user permissions.

Automatic recovery from firmware attacks

Firmware attacks can completely devastate your device. Stay protected with HP's self-healing BIOS. HP Sure Start Gen5 automatically recovers the BIOS from malware, rootkits or corruption.^[7]

Make IT management and security a breeze

Ease the burden of IT admins in Windows environments with HP Write Manager, a simple write filter solution that works across multiple Windows versions and prevents unauthorized changes to end user environments.^[9]

Durable for the day ahead

Carry this lightweight mobile thin client between meetings without worry. Designed-in reinforcements include a borderless display housed in an aluminum cover, a CNC keyboard deck, and a metal-reinforced, drop-jaw RJ-45 port.

Work even in bright light

Never lose sight of your work with an optional anti-glare touchscreen.^[2]

Work longer, charge faster

Long battery life gets you through the day without stopping to plug in, and when you do, HP Fast Charge gets you up to 50% battery life in just 30 minutes of charging.^[8]

[1] Internet access required and sold separately.

[2] Optional feature that must be configured at time of purchase.

[3] Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. Performance and clock frequency will vary depending on application workload and your hardware and software configurations. Intel's numbering, branding and/or naming is not a measurement of higher performance.

[4] Based on internal testing vs. previous generation product with 802.11ac wireless LAN module.

[5] Dock sold separately. Limited dock compatibility of HP ThinPro. See product QuickSpecs for compatible docks.

[6] MIL-STD testing is not intended to demonstrate fitness for U.S. Department of Defense contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Any accidental damage requires an optional HP Accidental Damage Protection Care Pack.

[7] HP Sure Start Gen5 is available on select HP PCs with Intel® processors. See product specifications for availability.

[8] Recharges the battery up to 50% within 30 minutes when the system is off or in standby mode, when used with the power adapter provided with the notebook, and no external devices are connected. After charging has reached 90% capacity, charging speed will return to normal. Charging time may vary +/-10% due to system tolerance.

[9] HP Write Manager requires Windows 10 IoT.

Specifications

Operating system	Windows 10 IoT Enterprise for Thin Clients 64
Processor family	Intel® Celeron® processor
Processor	Intel® Celeron® 5205U (1.9 GHz base frequency, 2 MB L2 cache, 2 cores)
Memory	8 GB DDR4-2400 SDRAM (2 x 4 GB)
Memory Slots	2 SODIMM
Internal Storage	128 GB M.2 SATA SSD
Optical drive	Not included
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics
Display	35.6 cm (14") diagonal, HD (1366 x 768), anti-glare, 220 nits, 45% NTSC
Display	14" diagonal, HD (1366 x 768), anti-glare, 220 nits, 45% NTSC ^[11,15,28]
Display size (diagonal)	35.6 cm (14")
Display size (diagonal)	14"
Audio features	Stereo speakers, mono or dual array microphone.
Minimum dimensions (W x D x H)	32.42 x 23.77 x 1.8 cm (Height varies depending on where measurement made.)
Minimum dimensions (W x D x H)	12.76 x 9.35 x 0.7 in (Height varies depending on where measurement made.)
Weight	Starting at 1.6 kg (Weight will vary by configuration.)
Weight	Starting at 3.52 lb (Weight will vary by configuration.)
Keyboard	Spill-resistant keyboard with drain
Pointing device	Clickpad with multi-touch gesture support
Camera	720p HD camera
Ports	1 USB 2.0 (charging) ^[12]
Expansion slots	1 multi-format digital media reader (Supports SD, SDHC, SDXC.)
Ports	1 headphone/microphone combo; 1 RJ-45; 1 USB 2.0 (charging); 1 USB 3.1 Type-C™ (charging); 1 HDMI 1.4; 2 USB 3.1 Gen1
Wireless	Intel® Dual Band Wireless-AC 9560 802.11a/b/g/n/ac (2x2) Wi-Fi® and Bluetooth® 5 Combo, non-vPro™
Protocols	Citrix® ICA/HDX; Microsoft RFX/RDP; VMware Horizon® View™ through RDP/PCoIP, and Blast Extreme
Power	HP Smart 65 W EM External AC power adapter ^[16]
Battery type	HP Long Life 3-cell, 45 Wh Li-ion

Energy efficiency	ENERGY STAR® certified
Sustainable impact specifications	Low halogen; TCO 5.0 Certified
Security management	Fingerprint reader; Preboot authentication; HP Power On Authentication; HP SureStart Gen5; Secure Erase; TPM 2.0 embedded security chip shipped with Windows 10 (Common Criteria EAL4+ Certified); Absolute persistence module; Windows Defender; HP BIOSphere Gen5; HP Write Manager ^[2,15,18,19, 20, 21, 22,26,27,29]
Software included	HP Device Manager; HP Easy Shell; HP ThinUpdate; HP True Graphics; HP USB Port Manager; HP Noise Cancellation Software; HP BIOS Config Utility; HP Easy Tools; HP Smart Zero Client Services ^[27]
Browser supported	Internet Explorer 11 (for Windows 10 IoT for Thin Clients); Mozilla Firefox 19 (for models with HP Thin Pro and HP Smart Zero Core)
UPC number	(ABA) 195122167127; (ABL) 195122837440

Additional specifications

Accessories	HP 65W USB-C Power Adapter 1HE08AA; HP USB-C Mini Dock 1PM64AA; HP 15.6 Business Top Load 2SC66AA; HP USB-C Dock G5 5TW10AA; HP Comfort Grip Wireless Mouse H2L63AA
Battery brand	HP
Battery capacity	45
Battery capacity uom	Wh
Battery cells number	3
Battery life	Long Life
Battery type	Li-ion
Color gamut	45% NTSC
Display	35.6 cm (14") diagonal HD display
Display	14" diagonal HD display
Display brightness	220
Display brightness uom	nits
Display panel technology	IPS
Display resolution (pixels)	1920 x 1080
Display resolution standard	FHD
Display size (diagonal) uom	"
Display size (diagonal, metric)	35.6
Display size (diagonal, metric) uom	cm
Display surface treatment	anti-glare
ECC memory	No
External I/O ports footnote number	[12]
I/O Port location	Right side
I/O Port location	Left side
Memory layout (slots & size)	2 x 4 GB
Memory module type	DIMM
Memory size	8
Memory size uom	GB
Memory speed	2400
Memory speed uom	MHz
Memory type	DDR4
Number of memory slots	2

Operating humidity range	10% to 90%, non-condensing
Operating temperature range	32 to 95°
Operating temperature range	0° to 35°
Processor Brand	Intel®
Processor base frequency	1.9
Processor base frequency uom	GHz
Processor cache	2 MB L2
Processor core	2
Processor family	Celeron®
Processor model	5205U
Processor speed	1.9 GHz
Processor threads	4
Standard memory note	Transfer rates up to 2400 MT/s.
Storage type	SSD

[2] Bluetooth®, Fingerprint reader, Windows Defender, HP Easy Shell and HP Write Manager are optional features, require Windows 10 IoT and must be configured at purchase.

[11] HD content required to view HD images.

[12] HDMI cable sold separately.

[15] Sold separately or as an optional feature.

[16] Availability may vary by country.

[18] HP BIOSphere Gen5 is available on select HP Pro and Elite PCs. See product specifications for details. Features may vary depending on the platform and configurations.

[19] For the methods outlined in the National Institute of Standards and Technology Special Publication 800-88 "Clear" sanitation method. HP Secure Erase does not support platforms with Intel® Optane™.

[20] Absolute agent is shipped turned off and will be activated when customers activate a purchased subscription. Subscriptions can be purchased for terms ranging multiple years. Service is limited, check with Absolute for availability outside the U.S. The Absolute Recovery Guarantee is a limited warranty. Certain conditions apply. For full details visit: <http://www.absolute.com/company/legal/agreements/computrace-agreement>. Data Delete is an optional service provided by Absolute Software. If utilized, the Recovery Guarantee is null and void. In order to use the Data Delete service, customers must first sign a Pre-Authorization Agreement and either obtain a PIN or purchase one or more RSA SecurID tokens from Absolute Software.

[21] Windows Defender Opt in and internet connection required for updates.

[22] HP Sure Start Gen5 is available on select HP PCs with Intel processors. See product specifications for availability.

[26] Fingerprint Reader is an optional feature that requires Windows 10 IoT and must be configured at purchase.

[27] Windows Defender, HP Easy Shell and HP Write Manager require Windows 10 IoT.

[28] Touchscreen panels are an optional feature that must be configured at purchase. Touchscreen gesture support is limited on HP ThinPro/HP Smart Zero, and functionality is dependent upon application being used.

[29] o TPM 2.0 is limited on HP ThinPro/HP Smart Zero, and functionality is dependent upon use of a customer-enabled application that can locate the TPM chip.

Accessories

Batteries/Chargers/Adapters

★ : Recommended

AC Adapters

HP 65W Smart AC Adapter	H6Y89AA ★
HP 45W Smart AC Adapter	H6Y88AA ★
HP 65W Slim AC Adapter	H6Y82AA
HP 65W USB-C Slim Travel Power Adapter	3PN48AA

Power Adapters

HP 65W USB-C Power Adapter	1HE08AA ★
HP 45W USB-C G2 Power Adapter	1HE07AA
HP 45W USB-C LC Power Adapter	1MZ01AA

Power Packs

HP Notebook Power Bank	N9F71AA
HP USB-C Essential Power Bank	3TB55AA

Keyboards/Mice and Input Devices

Keyboard and Mouse Kits

HP Slim Wireless Keyboard and Mouse	T6L04AA ★
HP Slim USB Keyboard and Mouse	T6T83AA
HP USB Essential Keyboard and Mouse	H6L29AA

Mice

HP Comfort Grip Wireless Mouse	H2L63AA ★
HP USB Premium Mouse	1JR32AA ★
HP 3-button USB Laser Mouse	H4B81AA
HP Bluetooth Travel Mouse	6SP30AA
HP Elite Presenter Mouse	2CE30AA
HP Slim Bluetooth Mouse	F3J92AA
HP Ultra Mobile Wireless Mouse	H6F25AA
HP Wireless Premium Mouse	1JR31AA
HP X4000b Bluetooth Mouse	H3T50AA

Keyboards

HP Wireless (Link-5) Keyboard	T6U20AA ★
HP USB Collaboration Keyboard	Z9N38AA
HP Wireless Collaboration Keyboard	Z9N39AA

Security and Protection

PC Locks

HP Sure Key Cable Lock	6UW42AA ★
HP Master Keyed Cable Lock 10mm	T1A63AA ★
HP Keyed Cable Lock 10 mm	T1A62AA ★
HP Combination Lock	TOY15AA
HP Combination Lock	TOY15UT
HP Dual Head Keyed Cable Lock 10 mm	T1A64AA
HP Dual Head Master Cable Lock 10 mm	T1A65AA
HP Essential Combination Lock	TOY16AA
HP Essential Combination Lock	TOY16UT
HP Master Keyed Cable Lock 10mm	T1A63UT

Privacy Filter

HP 14-in Privacy Filter	J6E65AA
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Docking and Port Replicators

Docking Stations

HP Thunderbolt Dock 120W G2	2UK37AA ★
HP USB-C/A Universal Dock G2	5TW13AA ★
HP USB-C Dock G5	5TW10AA ★
HP Thunderbolt Dock 120W G2 with Audio	3YE87AA
HP USB-C Mini Dock	1PM64AA
HP USB-C Universal Dock	1MK33AA
HP USB-C Universal Dock with 4.5 mm and USB Dock Adapter	2UF95AA

Docking Accessories

HP Thunderbolt Dock Audio Module	3AQ21AA
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Memory

DDR4 Memory

HP 16 GB 2666 MHz DDR4 Memory	4VN07AA
HP 4 GB 2666 MHz DDR4 Memory	4VN05AA
HP 8 GB 2666 MHz DDR4 Memory	4VN06AA

Cabinets and Stands

Carts

HP 20 Mgd Charging Cart V2	T9E83AA
HP 30 Mgd Charging Cart V2	T9E85AA
HP 32U Essential Charging Cart	1HC89AA

Notebook Stands

HP Hot Desk 2nd Monitor Arm	W3Z74AA
HP Hot Desk Stand	W3Z73AA

Monitor Stands

Monitor Stand	M9X76AA
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Point of Sales System Options

POS Display Accessories

HP Engage One 10.1-inch Display	1XD80AA
HP Engage One 10.1-inch Touch Display	1XD81AA
HP Engage One W 10.1-inch Display	3FH66AA
HP Engage One W 10.1-inch Touch Display	3FH67AA
HP L5010ta	2KY27AA

PC Drives and Storage

PC DVD Drives

HP External USB DVDRW Drive	F2B56AA
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Cables/Cable Kits/Cable Adapters

Audio and Video Cables

HP HDMI to DVI Adapter	F5A28AA
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Cable Adapters

HP Thunderbolt 120W G2 Cable	3XB94AA
HP USB-C to DP Adapter	N9K78AA
HP USB-C to USB 3.0 Adapter	N2Z63AA
HP USB-C to USB-A Hub	Z6A00AA
HP USB-C to VGA Adapter	N9K76AA

Graphics Cards

Graphics Connectors/Adapters

HP HDMI to VGA Adapter	H4F02AA
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Audio/Multimedia and Communication Devices

Headsets

HP Stereo 3.5mm Headset	T1A66AA
HP Stereo USB Headset	T1A67AA
HP UC Wireless Duo Headset	W3K09AA
HP UC Wireless Mono Headset	W3K08AA

Monitors

Business Monitors

★ : Recommended

EliteDisplays

HP EliteDisplay E243 23.8-inch Monitor	1FH47A8 ★
HP EliteDisplay E243 23.8-inch Monitor	1FH47AA ★
HP EliteDisplay E243d 23.8-inch Docking Monitor	1TJ76A8 ★
HP EliteDisplay E243d 23.8-inch Docking Monitor	1TJ76AA ★
HP EliteDisplay E243p 23.8-inch Sure View Monitor	5FT13A8 ★
HP EliteDisplay E243p 23.8-inch Sure View Monitor	5FT13AA ★
HP E344c 34-inch Curved Monitor	6GJ95AA
HP EliteDisplay E202 20-inch Monitor	M1F41AA
HP EliteDisplay E223 21.5-inch Monitor	1FH45AA
HP EliteDisplay E223 21.5-inch Monitor	7MP21AA
HP EliteDisplay E223d 21.5-inch Docking Monitor	5VT82AA
HP EliteDisplay E230t 23-inch Touch Monitor	W2Z50AA
HP EliteDisplay E233 23-inch Monitor	1FH46AA
HP EliteDisplay E233 23-inch Monitor	7MQ32AA
HP EliteDisplay E233 23-inch Monitor Head Only	2PD30AA
HP EliteDisplay E243 23.8-inch Monitor	1FH47A7
HP EliteDisplay E243 23.8-inch Monitor	1FH47AS
HP EliteDisplay E243 23.8-inch Monitor	1FH47AT
HP EliteDisplay E243 23.8-inch Monitor	7MQ82AA
HP EliteDisplay E243 23.8-inch Monitor Head Only	1FH47U9
HP EliteDisplay E243 23.8-inch Monitor Head Only	3XQ67AA
HP EliteDisplay E243d 23.8-inch Docking Monitor	1TJ76AT
HP EliteDisplay E243d 23.8-inch Docking Monitor	1TJ76U9
HP EliteDisplay E243d 23.8-inch Docking Monitor	7MP20AA
HP EliteDisplay E243i 24-inch Monitor	1FH49AA
HP EliteDisplay E243i 24-inch Monitor	7MQ83AA
HP EliteDisplay E243m 23.8-inch Monitor	1FH48AA
HP EliteDisplay E243p 23.8-inch Sure View Monitor	5FT13A7
HP EliteDisplay E243p 23.8-inch Sure View Monitor	5FT13AT
HP EliteDisplay E243p 23.8-inch Sure View Monitor	5FT13U9

HP EliteDisplay E273 27-inch Monitor	1FH50AA
HP EliteDisplay E273 27-inch Monitor	7MQ84AA
HP EliteDisplay E273d 27-inch Docking Monitor	5WN63AA
HP EliteDisplay E273m 27-inch Monitor	1FH51AA
HP EliteDisplay E273q 27-inch Monitor	1FH52AA
HP EliteDisplay E273q 27-inch Monitor	7MQ85AA
HP EliteDisplay E324q 31.5-inch QHD Monitor	5DP31AA
HP EliteDisplay S14 14-inch Portable Display	3HX46AA
HP EliteDisplay S340c 34-inch Curved Monitor	V4G46AA

Z Displays

HP DreamColor Z24x G2 Display	1JR59A4
HP DreamColor Z27x G2 Studio Display	2NJ08A4
HP DreamColor Z31x Studio Display	Z4Y82A4
HP Z22n G2 21.5-inch Display	1JS05A4
HP Z23n G2 23-inch Display	1JS06A4
HP Z24n G2 24-inch Display	1JS09A4
HP Z24nf G2 23.8-inch Display	1JS07A4
HP Z27 27-inch 4K UHD Display	2TB68A4
HP Z27n G2 27-inch Display	1JS10A4
HP Z32 31.5-inch 4K UHD Display	1AA81A4
HP Z38c 37.5-inch Curved Display	Z4W65A4
HP Z43 42.5-inch 4K UHD Display	1AA85A4

E-Series

HP E14 G4 Portable Monitor	1B065AA	
HP E24 G4 FHD Monitor	3R433AA	obsolete
HP E24d G4 FHD Advanced Docking Monitor	6PA50AA	
HP E27d G4 QHD Advanced Docking Monitor	6PA56AA	

Healthcare Edition Displays

HP Healthcare Edition HC241 Clinical Review Monitor	3ME68AA
HP Healthcare Edition HC241p Clinical Review Monitor	3ME69AA
HP Healthcare Edition HC270cr Clinical Review Monitor	1QW03AA

Large Format Display

HP LD5512 4K UHD Conferencing Display	2YD85AA
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ProDisplays

HP Mini-in-One 24 Display	7AX23AA
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Value Displays

HP N220h 21.5-inch Monitor	4JF58AA	obsolete
HP N223 21.5-inch Monitor	3ML60AA	
HP N246v 23.8-inch Monitor	1RM28AA	
HP N246v 23.8-inch Monitor	3NS59AA	
HP P224 21.5-inch Monitor	5QG34AA	
HP P241v 23.8-inch Monitor	6CQ79AA	
HP P244 23.8-inch Monitor	5QG35AA	
HP V214a 20.7-inch Monitor	1FR84AA	
HP V22b Monitor	2XM33AA	
HP V24b Monitor	2XM34AA	
HP V270 27-inch Monitor	2KZ35AA	
HP V270 27-inch Monitor	3PL17AA	
HP VH27 27-inch Monitor	2KZ36AA	obsolete

P-Series

HP P19v G4 Monitor	9TY84AA
HP P21v G4 Monitor	9TY72AA
HP P22 G4 22 FHD Monitor	1A7E4AA
HP P22h G4 FHD Monitor	7UZ36AA
HP P22h G4 FHD Monitor	7UZ36AT
HP P22v G4 Monitor	9TT53AA
HP P24 G4 24 FHD Monitor	1A7E5AA
HP P24h G4 FHD Monitor	7VH44AA
HP P24q G4 QHD Height Adjust Monitor	8MB10AA
HP P24v G4 Monitor	9TT78AA
HP P27h G4 FHD Monitor	7VH95AA
HP P27q G4 QHD Height Adjust Monitor	8MB11AA
HP P27v G4 Monitor	9TT20AA

Business LCD Monitors

HP P204 19.5-inch Monitor	5RD65AA
HP P204v 19.5-inch Monitor	5RD66AA

S-Series

HP S430c 43.4-inch Curved Ultrawide Monitor

5FW74AA

Personal Systems Software Services

★ : Recommended

Personal Systems Electronic Software Delivery E-LTUs

HP 1 year Thin Client Conversion Solution Maintenance Service E-LTU	UB5X4AAE
HP 3 year Thin Client Conversion Solution Maintenance Service E-LTU	UB5X5AAE

Application Software

Thin Client Software

HP Device Manager 5.0	DEVMGR5
HP Device Manager 5.0	HPDMPRE
HP PC Converter for Windows	6RA64AAE
HP ThinPro Upgrade E-LTU for HP t520/t620 Thin Client	1MY25AAE
HP ThinPro for PC Converter	6NT16AAE

Cloud Client Solutions

★ : Recommended

Cloud Client Solutions

Thin Client Solution for Contact Centers	TC-CONTACTCTR
Thin Client Solution for Healthcare	TC-HEALTH

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