



HP Engage Flex Mini Retail System (54S90UT)

Overview

An operations powerhouse that fits anywhere

Drive every facet of your business—from back-office operations to digital customer engagements, to point-of-sale—with the HP Engage Flex Mini. It packs big performance into an incredibly compact device and provides near endless configuration options, so you get a system tailored for your needs.



Petite yet powerful

This mighty powerhouse delivers across your business without taking up valuable space—featuring an Intel® Core™ processor[2] and ample memory and storage for fast, seamless operations.

Industry leading security and reliability

Business interruptions are not an option. That's why the HP Engage Flex Mini was designed to pass rigorous military standard testing[5] and has security features built-in—protecting from the BIOS to the browser, above and below the OS.

Endlessly configurable

Design a system for your unique business operations with abundant options across storage, memory, and processor. Further customize with two configurable I/O ports to attach accessories and displays, and a choice of Windows 10 Pro or Windows 10 IoT.[4]

Accelerate your edge solutions

Get the power you need to run sensor-based solutions including inventory management and more. Choose from the latest graphics and Intel® processor options.

[2] Optional, configurable feature that must be configured at purchase.

[4] Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. See <http://www.windows.com>.

[5] MIL-STD-810G is not intended to demonstrate fitness of U.S. Department of Defense (DoD) contract requirements or for military use. Test results are not a guarantee of future performance under these test conditions. Accidental damage requires an optional HP Accidental Damage Protection Care Pack.

Specifications

Form factor	Mini
Operating system	Windows 11 Pro <i>(Device comes with Windows 10 and a free Windows 11 upgrade or may be preloaded with Windows 11. Upgrade timing may vary by device. Features and app availability may vary by region. Certain features require specific hardware (see Windows 11 Specifications).)</i>
Processor family	Intel® Celeron® processor
Processor	Intel® Celeron® G5905T (3.3 GHz base frequency, 4 MB L3 cache, 2 cores, 2 threads) ^[6]
Chipset	Intel® Q470
Memory	4 GB DDR4-2666 MT/s (1 x 4 GB)
Memory Slots	2 SODIMM
Internal Storage	256 GB PCIe® NVMe™ M.2 SSD
Hard drive (2nd)	256 GB PCIe® NVMe™ M.2 SSD
Internal drive bays	One 2.5"
Graphics	Integrated
Graphics (integrated)	Intel® UHD Graphics 610
Audio	Realtek ALC3205 codec, internal speaker, combo microphone/headphone jack
Dimensions (W x D x H)	17.7 x 17.5 x 3.4 cm
Dimensions (W x D x H)	6.97 x 6.89 x 1.34 in
Weight	1.25 kg <i>(Exact weight depends on configuration.)</i>
Weight	2.75 lb <i>(Exact weight depends on configuration.)</i>
Keyboard	HP Wired Desktop 320K Keyboard
Ports	1 headphone/microphone combo; 1 SuperSpeed USB Type-A 5Gbps signaling rate (charging); 1 SuperSpeed USB Type-C® 10Gbps signaling rate; 1 SuperSpeed USB Type-A 10Gbps signaling rate
Expansion slots	1 M.2 2230; 2 M.2 2280 <i>(1 M.2 slot for WLAN and 2 M.2 2280 slots for storage.)</i>
Ports	1 RJ-45; 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 DisplayPort™ 1.4; 2 SuperSpeed USB Type-A 10Gbps signaling rate
Ports	1 HDMI
Package dimensions (W x D x H)	49.8 x 23.5 x 13.2 cm
Package weight	3.40 kg
Power	65 W external power adapter, up to 89% efficiency

Management features

HP BIOS Config Utility (download); HP Client Catalog (download); HP Driver Packs (download); HP System Software Manager (download)^[10,11,12]

Sustainable impact specifications

Low Halogen

Security management

Setup password (via BIOS); Trusted Platform Module TPM 2.0 Embedded Security Chip; DriveLock; HP Power On Authentication; SATA port disablement (via BIOS); Support for chassis padlocks and cable lock devices; HP Sure Sense; HP Sure Click; HP Secure Erase; HP Sure Recover Gen3; HP Sure Run Gen3; HP Client Security Manager Gen6; HP BIOSphere Gen6; HP Sure Start Gen6; HP DriveLock and Automatic DriveLock; HP Cloud Recovery; HP Management Integration Kit for Microsoft System Center Configuration Management Gen 4; HP Image Assistant Gen5^[13,14,15,16,17,18,19,20,21]

Software included

HP Support Assistant; HP Jumpstart; HP Noise Cancellation Software; HP Desktop Support Utilities; Buy Office (sold separately)^[9]

UPC number

196337067769

Additional specifications

I/O Port location	Rear
I/O Port location	Front
Keyboard connectivity	wired
Keyboard interface	USB
Memory layout (slots & size)	1 x 4 GB
Memory module type	SODIMM
Memory size	4
Memory size uom	GB
Memory speed	2666
Memory speed uom	MT/s
Memory type	DDR4
Number of memory slots	1
Operating humidity range	10 to 90% RH
Operating temperature range	50 to 95°F
Operating temperature range	10 to 35°C
Package dimensions (W x D x H)	19.61 x 9.25 x 5.20 in
Package weight	7.40 lb
Processor Brand	Intel®
Processor base frequency	3.3
Processor cache	4 MB L3
Processor core	2
Processor family	Celeron®
Processor frequency UOM	GHz
Processor model	G5905T
Processor threads	2
Standard memory note	Transfer rates up to 2666 MT/s.
Storage capacity	256
Storage capacity uom 01	GB
Storage form factor 01	M.2
Storage interface 01	PCIe®
Storage interface protocol 01	NVMe™
Storage memory technology 01	TLC
Storage type	SSD

Storage type 01

SSD

UNSPSC code

43211505

[6] Multi-core 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.

[9] HP Support Assistant: Requires Windows and Internet access.

[10] HP Driver Packs: Not preinstalled, however available for download at <http://www.hp.com/go/clientmanagement>.

[11] HP Manageability Integration Kit can be downloaded from <http://www.hp.com/go/clientmanagement>.

[12] HP Cloud Recovery is available for HP Elite and Pro desktops and laptops PCs with Intel® or AMD processors and requires an open, wired network connection. Note: You must back up important files, data, photos, videos, etc. before use to avoid loss of data. Detail please refer to: <https://support.hp.com/us-en/document/c05115630>.

[13] HP BIOSphere Gen6 is available on select HP Pro and Elite PCs. Features may vary depending on the platform and configurations.

[14] Secure Erase 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™.

[15] HP Sure Click requires Windows 10 Pro or Enterprise. See https://bit.ly/2PrLT6A_SureClick for complete details.

[16] HP Client Security Manager Gen6 requires Windows and is available on the select HP Elite and Pro PCs.

[17] HP Sure Start Gen6 is available on select HP PCs.

[18] HP Sure Recover Gen3 is available on select HP PCs and requires an open network connection. You must back up important files, data, photos, videos, etc. before using HP Sure Recover to avoid loss of data.

[19] HP Sure Run Gen3 is available on select Windows 10 based HP Pro, Elite and Workstation PCs with select Intel® or AMD processors.

[20] HP Sure Sense requires Windows 10.

[21] HP Storage Drivelock does not work with Self Encrypting or Optane™ based storage.

Accessories

Point of Sales System Options

★ : Recommended

POS Terminal Accessories

60W Printer AC Adapter	3A2P5AA
Datalogic 1500i Presentation Scanner	9BU50AA
Datalogic 1500i Whi Presentation Scanner	3F568AA
Datalogic 18W AC Adapter w/Power Cord + Cable	A0EK1AA
Datalogic 3450Vsi Presentation Scanner	7UZ38AA
EPSON 10FT USB CABLE	2LR29AA
Epson 10 FT Powered USB Y Cable	2KH40AA
Epson 12 FT PUSB Cable	7NX62AA
Epson 6 FT Serial Black Cable	2KH41AA
Epson 6FT PUSB Dark Gray Cable	1C5A0AA
Epson 6FT PUSB Dark Gray Cable	2KH43AA
HP 6 Foot PUSB Black Cable	5C2B8AA
HP 6 Foot USB Black Cable	5C2B7AA
HP Cable Pack for Dual HP Cash Drawer	QT538AA
HP Engage Heavy Duty Cash Drawer RL	8QX99AA
HP Engage One Prime Cash Drawer Cable	5UU45AA
HP Engage One Pro AiO Advanced Fanless Hub Kit	9YH40AA

POS Bar Code and Magnetic Stripe Readers

Datalogic 4090 Wireless Charging Base	4P775AA
Datalogic 4190 Wireless Charging Base	4P776AA
Datalogic Gryphon GBT4500 2D Wireless Barcode Scanner	4P886AA
HP Engage 2D G2 Barcode Scanner	6Y2V4AA
HP Engage 2D G2 White Barcode Scanner	6Y2V5AA
HP Engage Imaging Barcode Scanner II	5YQ08AA
HP Engage Imaging Barcode Scanner II	5YQ08AT
HP Engage One Prime Barcode Scanner	638L9AA
HP Engage One Prime Barcode Scanner	638L9AT

POS Printer

Epson H6000V Hybrid POS Printer	4ZE21AA
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Epson TM-88VI Serial Ethernet USB Printer only	2HV25AA	
Epson TM-H6000VI Hybrid Printer	A1NL2AA	
Epson TM-L90II Printer	4J8H7AA	
Epson TM-T20IIIL Serial USB Printer	340U3AA	
Epson TM-T88VII PUSB Thermal Printer	8G0G7AA	
Epson TM-T88VII Serial Ethernet USB Thermal Printer	8G0G6AA	
Epson TM-m30II Japan Printer	38N27AA	
Epson TM-m30II Printer	340U1AA	
Epson TM-m30II White Japan Printer	38N28AA	
Epson TM-m30II White Printer	340U2AA	
Epson TM88VI PUSB Printer only	6BC94AA	obsolete
HP Engage PUSB Thermal Printer	299V0AA	
HP Engage Serial Ethernet USB Thermal Printer	299U7AA	
HP Value Series USB Thermal Printer without AC Adapter	60Q65AA	
HP Value Thermal Receipt Printer	4AK33AA	

POS Cash Drawer

HD Cash Drawer Till 5B5C	31G54AA	
HP Engage One Prime Cash Drawer	638M5AA	
HP Heavy Duty Cash Drawer	FK182AA	
HP Standard Duty Cash Drawer	QT457AA	
HP Standard Duty Cash Drawer	QT457AT	
HP Standard Duty Till with Lockable Lid	QT458AA	
HP Standard Duty USB Keyless Cash Drawer	A09FBAA	
Heavy Duty Till 4B8C Cash Drawer Till	54J44AA	
Standard Duty Cash Drawer Till 4B8C	4Z4T1AA	
Standard Duty Cash Drawer Till 5B5C	4Z4T0AA	

POS Display Accessories

HP Engage 10 HD No Stand + VESA Mount Monitor	3F1W8AA	
HP Engage 10t HD No Stand + VESA Mount Monitor	3F1W9A7	
HP Engage 10t HD No Stand + VESA Mount Monitor	3F1W9AA	
HP Engage 14t FHD Monitor	42C90AA	
HP Engage 16t FHD MSR Monitor	2D9Z4AA	
HP Engage 16t FHD Magnetic Strip Reader No Stand + Vesa Mount Monitor	8Q3W5AA	
HP Engage 16t FHD Monitor	2D9X0AA	

HP Engage 16t FHD No Stand+No VESA Monitor - 16t	8Q3N2AA
HP Engage 6.6 inch Display	9YH48AA
HP Engage 6.6 inch Pole Display	10P79AA
HP Engage 6.6 inch White Display	156N8AA
HP Engage One 10.1-inch Display	1XD80A7
HP Engage One 10.1-inch Display	1XD80AA
HP Engage One 10.1-inch Display	1XD81A7
HP Engage One 10.1-inch Touch Display	1XD81AA
HP Engage One W 10.1-inch Display	3FH66A8
HP Engage One W 10.1-inch Display	3FH66AA
HP Engage One W 10.1-inch Touch Display	3FH67A8
HP Engage One W 10.1-inch Touch Display	3FH67AA
HP L7010t 10.1-inch Retail Touch Monitor	T6N30A8
HP L7010t 10.1-inch Retail Touch Monitor	T6N30AA
HP L7014 14-inch Retail Monitor	T6N31A8
HP L7014 14-inch Retail Monitor	T6N31AA
HP L7014t 14-inch Retail Touch Monitor	T6N32A8
HP L7014t 14-inch Retail Touch Monitor	T6N32AA
HP L7016t 15.6-inch Retail Touch Monitor	V1X13A8
HP L7016t 15.6-inch Retail Touch Monitor	V1X13AA

POS Monitors and Accessories

HP Engage 14 Standalone Stand	4A2G1AA
HP Engage 14 VESA Plate	4A2G2AA
HP Engage 16t Column Stand	4A2F9AA
HP Engage 16t VESA Plate	4A2G0AA
HP Engage Stability Mount Stand Attachment	4A2F8AA
HP Monitor Stand for L7010t L7014 and L7014t	T6N33AA
HP Monitor Stand for L7016t	W0Q45AA

POS Fingerprint Readers

HP Engage One Fingerprint Reader	1RL98AA
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POS Keyboard

HP POS USB Keyboard	FK221AA
HP POS USB Keyboard	FK221AT

HP POS USB Keyboard with Magnetic Stripe Reader

FK218AA

HP POS USB Keyboard with Magnetic Stripe Reader

FK218AT

Batteries/Chargers/Adapters

AC Adapters

Epson PS-190 50W AC Adapter

92Q81AA

Accessories for PC

Keyboards/Other Input Devices

★ : Recommended

Wired Keyboards

HP 125 USB WD KBD (Bulk 12)	266C9A6
HP 125 Wired Keyboard	266C9AA

Wired Combo

HP 225 Wired Mouse and Keyboard Combo	286J4AA
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Mice/Pens/Other Pointing Devices

Wired Mice

HP 125 Wired Mouse	265A9AT
HP 125 Wired Mouse	265A9UT
HP 125 Wired Mouse (Bulk120)	265A9A6
HP 128 LSR WRD Mouse (Bulk120)	265D9A6
HP 128 Laser Wired Mouse	265D9AA

Components/Upgrades

Chassis/Rails

HP Desktop Mini v4+ VESA Sleeve	99T54AA
HP Desktop Mini v4+ VESA Sleeve with Power Supply Holder	99T55AA

Port Replicators/Dongles/Docking

Cables/Cable Adapters/Dongles

HP DisplayPort To VGA Adapter	F7W97AA
HP Powered USB Y Cable	BM477AA
HP USB-C to VGA Adapter	N9K76AA
HP USB-C to VGA Display Adapter	P7Z54AA

Security

Security Cables

HP Essential Combination Lock	TOY16AA
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HP Keyed Cable Lock 10 mm

T1A62AA

Monitors

Business Monitors

★ : Recommended

E-Series

HP E24i G4 WUXGA Monitor	9VJ40AA
HP E24mv G4 FHD Conferencing Monitor	169L0AA

P-Series

HP P24h G4 FHD Monitor	7VH44AA
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