

ASUS ExpertCenter PN54

Empower AI With Unmatched Connectivity



The ASUS ExpertCenter PN54 is a high-performance, ultra-compact solution designed for next-gen computing needs. Powered by AMD Ryzen AI 300 series processors, with XDNA2 NPU for AI acceleration and integrated Radeon 800M graphics, it effortlessly handles multitasking, AI-intensive tasks, and supports four simultaneous 4K displays, providing an expansive, detailed visual experience. With dual 2.5G LAN ports, 6 USB ports, and Wi-Fi 7, it ensures fast, versatile connectivity. Its sleek 0.6L design with tool-less access offers powerful, adaptable, and space-saving convenience for AI-driven professionals.

Key Selling Points

- **Unleash Pure Power:** Featuring AMD Ryzen™ AI 300 Series Processors with 12 ultra-fast cores, designed for powerful, efficient multitasking.
- **Next-Level AI:** Cutting-edge XDNA2 NPU with up to 50 TOPS—5x faster AI performance than before for responsive, dynamic computing.
- **Immersive 4K Visuals:** AMD Radeon™ 800M Graphics delivers breathtaking detail across up to four 4K displays.
- **Ultrafast and Versatile connectivity:** Enjoy ultrafast connectivity with Wi-Fi 7 and Bluetooth 5.4. Benefit from a versatile array of connectivity options, including 6 USB ports, dual 2.5G LANs, a fingerprint reader for Windows Hello, and built-in speakers and a microphone for voice command support.
- **Upgrade in a Snap :** Tool-free design keeps you ahead effortlessly.
- **Sleek, Durable Design:** The Ultra-thin (34mm), eco-conscious chassis runs reliably, 24/7, sets a new standard for thin and light computing performance.

Audience:

- Small and Medium Business
- Enterprises
- Retail Shops
- Smart Manufacturing
- Smart Banking
- Smart Healthcare
- Smart City

Target Usages:

- Content Creation
- Productivity
- Entertainment
- Edge Computing
- Digital Signage
- Kiosk
- POS System

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Mini-PC Specifications



Marketing Name		ASUS ExpertCenter PN54
Project Code		PN54
ASUS Logo		Yes
Color		Black
OS Support		Windows® 11 Home/ Pro 24H2 Windows® 11 IoT Enterprise
CPU		AMD Ryzen AI 7 350 processor, cTDP40W AMD Ryzen AI 5 340 processor, cTDP40W
NPU		Up to 50 TOPS
Chipset		Integrated
Graphics		Integrated- AMD Radeon 860M/840M Graphics
Memory		2 x SO-DIMM, DDR5-5600MHz memory (8G/16G/32G), up to 32G*2
Storage		1 x M.2 2280 PCIe Gen4x4, supports 256GB~2TB NVMe™ SSD
Wireless Network		Wi-Fi 7 MT7925, Bluetooth® 5.4 Wi-Fi 6E MT7922, Bluetooth® 5.4
LAN		RTL8125BG, 2.5G LAN, 10/100/1000/2500 Mbps
Audio		Realtek ALC 8233 1 x Internal Mono-Speaker with External Smart AMP 1 x Internal Digital Mics
TPM		fTPM 2.0 or Optional Discrete TPM 2.0 Chip
Card Reader		None
Top I/O Ports		1 x Fingerprint Reader
Front I/O Ports		1 x Power button 1 x Copilot button 1 x USB 3.2 Gen2 Type-C (10Gps) 2 x USB 3.2 Gen2 Type-A (10Gbps) 1 x Audio Jack (Line out/Mic in/Headphone out)
Back I/O Ports		1 x USB 4 Type-C (Supports DisplayPort 2.1 and PD-in 100W, max. speed 40Gbps) 1 x USB 3.2 Gen 2 Type-A (10Gbps) 1 x USB 2.0 Gen 2 Type-A (5Gbps) 1 x HDMI 2.1 (FRL8) ⁽¹⁾ 2 x DisplayPort 1.4 (8.1Gps) 1 x 2.5G RJ45 LAN 1 x 2.5G RJ45 LAN (Optional) 1 x DC-in
Side I/O Ports		1 x Kensington Lock
Power Supply		20Vdc/19Vdc, 6.0A/6.32A, 120W Power Adapter
Operating Temp		0 to 40C
Storage Temp		-40 to 60C
Dimensions (W x D x H)		130mm x 130mm x 34mm
Weights		530g
Accessories		AC Adapter+Power Cord ⁽²⁾ VESA Bracket and Screws Safety/Caution/Regulatory Insert Warranty Card

⁽¹⁾ Supports HDMI CEC & HDCP 2.2; Supports 4K@60Hz as specified in HDMI 2.1
⁽²⁾ Power cord included is region specific, and some SKUs do not include the power cord

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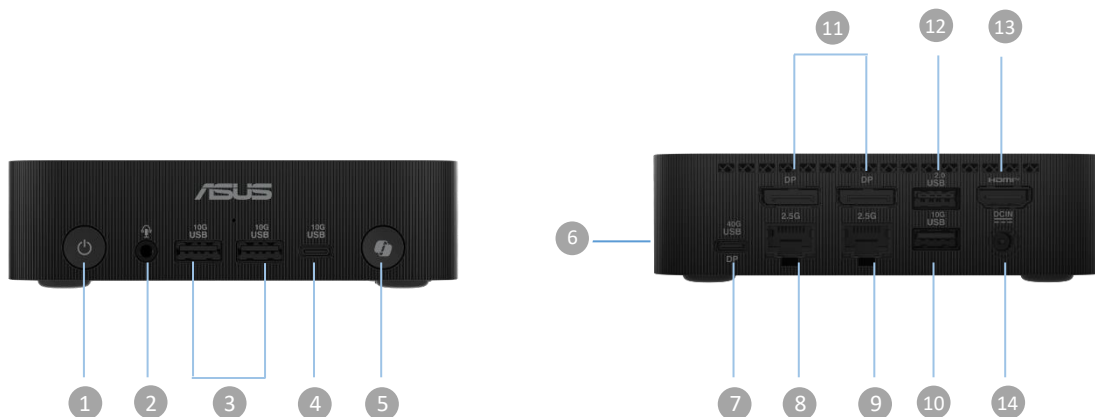
Kit Specifications

Marketing Name	ASUS ExpertCenter PN54
Project Code	PN54-B
ASUS	No
Color	Black
OS Support	Windows @11 Home/ Pro Windows@ 11 IoT Enterprise <i>No OS installed at the shipment</i>
CPU	AMD Ryzen AI 7 350 processor, cTDP40W AMD Ryzen AI 5 340 processor, cTDP40W
Chipset	Integrated
Graphics	Integrated- AMD Radeon 860M/840M Graphics
Memory	2 x SO-DIMM, DDR5-5600MHz memory, supports up to 32G*2 <i>No memory installed at the shipment</i>
Storage	2 x M.2 2280 PCIe Gen4x4, supports 256GB~2TB NVMe™ SSD <i>No storage installed at the shipment</i>
Wireless Network	Wi-Fi 7 MT7925, Bluetooth® 5.4 Wi-Fi 6E MT7922, Bluetooth® 5.4
LAN	RTL8125BG, 2.5G LAN, 10/100/1000/2500 Mbps Realtek ALC 8233
Audio	1 x Internal Mono-Speaker with External Smart AMP 1 x Internal Digital Mics
TPM	fTPM 2.0 or Optional Discrete TPM 2.0 Chip
Card Reader	None
Top I/O Ports	1 x Fingerprint Reader 1 x Power button 1 x Copilot button
Front I/O Ports	1 x USB 3.2 Gen2 Type-C (10Gps) 2 x USB 3.2 Gen2 Type-A (10Gbps) 1 x Audio Jack (Line out/Mic in/Headphone out)
Back I/O Ports	1 x USB 4 Type-C (Supports DisplayPort 2.1 and PD-in 100W, max. speed 40Gbps) 1 x USB 3.2 Gen 2 Type-A (10Gbps) 1 x USB 2.0 Gen 2 Type-A (5Gbps) 1 x HDMI 2.1 (FRL8) ¹ 2 x DisplayPort 1.4 (8.1Gps) 1 x 2.5G RJ45 LAN 1 x 2.5G RJ45 LAN (Optional) 1 x DC-in
Side I/O Ports	1 x Kensington Lock
Power Supply	20Vdc/19Vdc, 6.0A/6.32A, 120W Power Adapter
Operating Temp	0 to 40C
Storage Temp	-40 to 60C
Dimensions (W x D x H)	130mm x 130mm x 34mm
Weights	530g
Accessories	AC Adapter+Power Cord ² VESA Bracket and Screws Safety/Caution/Regulatory Insert Warranty Card

⁽¹⁾ Supports HDMI CEC & HDCP 2.2 ; Supports 4K@60Hz as specified in HDMI 2.1
⁽²⁾ Power cord included is region specific, and some SKUs do not include the power cord

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Model PN54 Connections

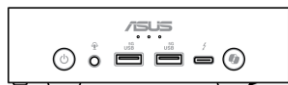


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|---|----------------------------------|----|----------------------------------|----|----------------------------|
| 1 | 1 x Power Button | 6 | 1 x Kensington Lock (Side Port) | 11 | 2 x DisplayPort 1.4 |
| 2 | 1 x Audio Jack | 7 | 1 x USB 4 Type-C (40Gbps) | 12 | 1 x USB 2.0 Type-A (5Gbps) |
| 3 | 2 x USB 3.2 Gen2 Type-A (10Gbps) | 8 | 1 x 2.5Gb Ethernet | 13 | 1 x HDMI 2.1 |
| 4 | 1 x USB 3.2 Gen2 Type-C (10Gbps) | 9 | 1 x 2.5Gb Ethernet (Optional) | 14 | 1 x DC in |
| 5 | 1 x Copilot Button | 10 | 1 x USB 3.2 Gen2 Type-A (10Gbps) | 15 | 1 x Fingerprint Reader |

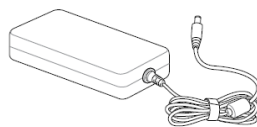


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What's in the box



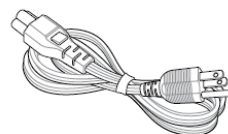
PN54



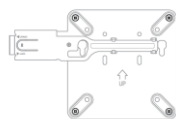
Power Adapter
120 W



Inserts



Power Cord*



VESA bracket and
Screws

NOTE:

- The most up-to-date and accurate product specifications are available on www.asus.com for download.
- Product and accessory images are for illustrative purposes only. The actual appearance and specifications may vary depending on the model.
- *The bundled power adapter may vary depending on the model and the country (or region) of sale.
- Some bundled accessories may vary depending on the model. For details on these accessories, refer to their respective user manuals.
- If the device or its components fail or malfunction during normal and proper use within the warranty period, bring the warranty card to the ASUS Service Center for replacement of the defective components.