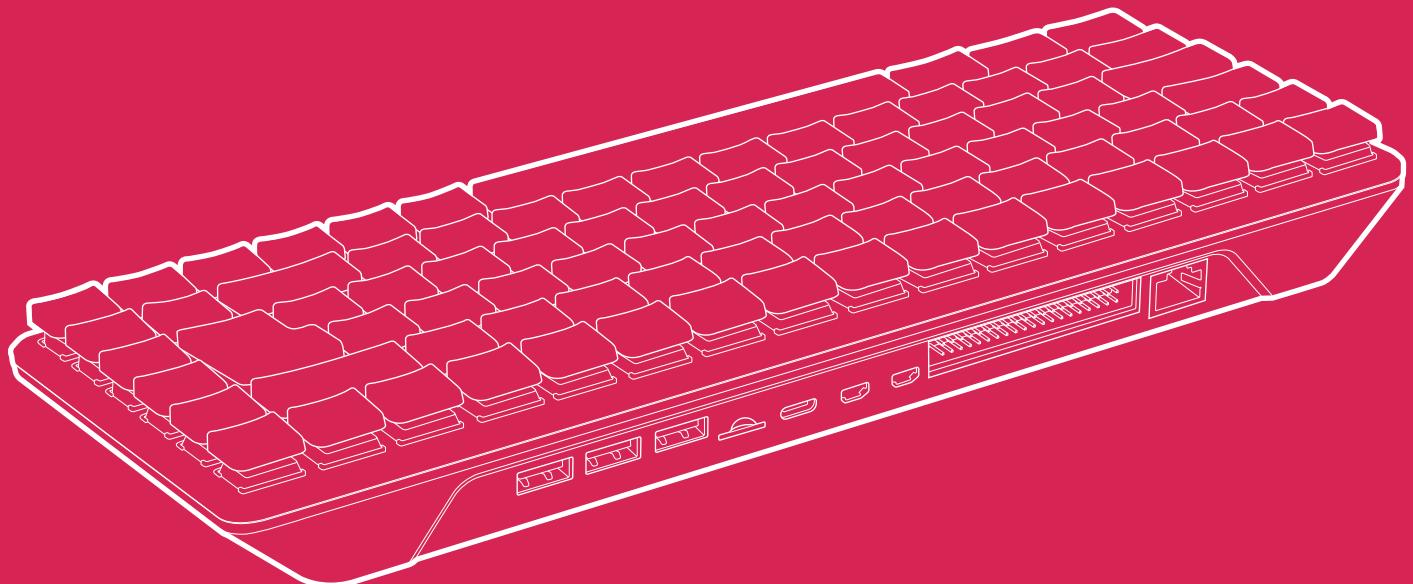




Raspberry Pi 500+

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Overview



Raspberry Pi 500+ is a premium computer built into a high-quality mechanical keyboard, redefining the compact PC experience for power users and enthusiasts.

Powered by the same quad-core 64-bit Arm processor and RP1 I/O controller found in Raspberry Pi 5, it also integrates a one-piece aluminium heatsink for improved thermal performance. This ensures your Raspberry Pi 500+ will run fast and smoothly even under heavy load, while delivering glorious dual 4K display output.

Raspberry Pi 500+ features 16GB of LPDDR4X-4267 SDRAM to handle the most memory-intensive workloads, and a pre-installed 256GB Raspberry Pi SSD for blazingly fast I/O performance. Clicky Gateron KS-33 Blue mechanical keyboard switches are paired with ergonomic low-profile keycaps and individually addressable RGB LEDs.

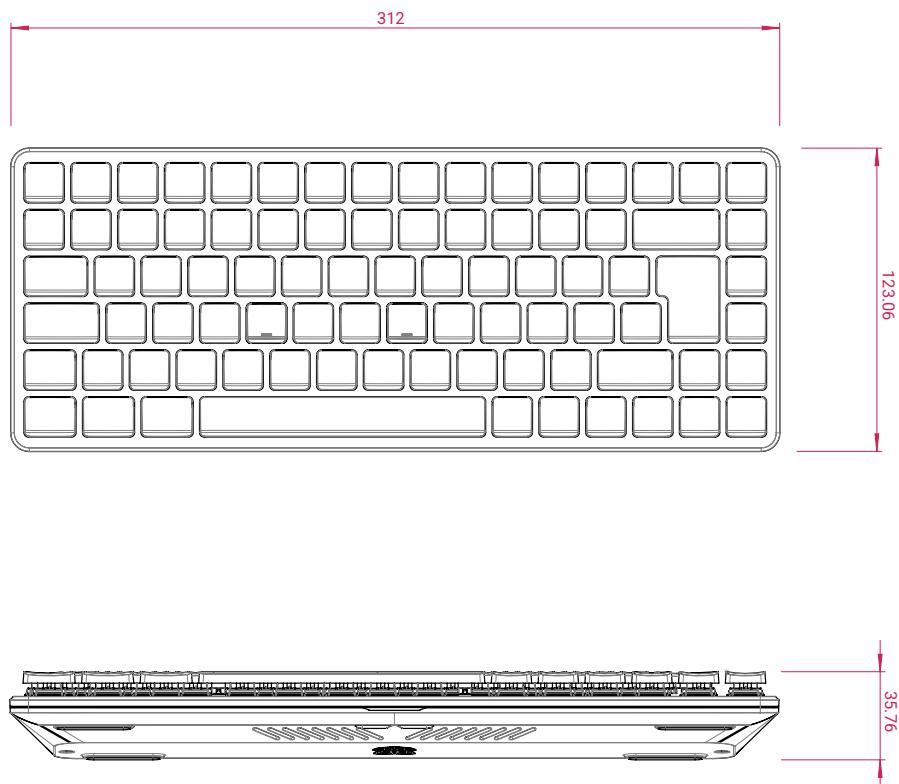
Tools are included for opening the case to replace the SSD and for swapping out the default keycaps. Comprehensive instructions are available at rpltd.co/500plus-docs.

For those looking for the complete Raspberry Pi 500+ setup, the Raspberry Pi 500+ Desktop Kit comes with a mouse, a USB-C power supply and an HDMI cable, along with the Official Raspberry Pi Beginner's Guide, to help you get the most out of your new computer.

Specification

Processor	2.4GHz quad-core 64-bit Arm Cortex-A76 CPU, with cryptography extensions, 512KB per-core L2 caches and a 2MB shared L3 cache
Memory	16GB LPDDR4X-4267 SDRAM
Connectivity	Dual-band (2.4GHz and 5.0GHz) IEEE 802.11b/g/n/ac Wi-Fi® Bluetooth 5.0, BLE Gigabit Ethernet 2 × USB 3.0 ports and 1 × USB 2.0 port 2 × micro HDMI ports
GPIO	Horizontal 40-pin GPIO header
Display output	Supports up to dual 4Kp60
Multimedia	H.265 (4Kp60 decode) OpenGL ES 3.1 graphics Vulkan 1.3
Storage	256GB Raspberry Pi SSD pre-installed with Raspberry Pi OS Support for M.2 NVMe SSDs up to 2280 (22mm × 80mm) form factor microSD card slot for operating system and data storage
Keyboard	84-, 85- or 88-key mechanical keyboard (depending on regional variant) Gateron KS-33 Blue low-profile switches
Power	5V DC via USB connector
Operating temperature	0°C to +50°C
Dimensions	312mm × 123.06mm × 35.76mm
Production lifetime	Raspberry Pi 500+ will remain in production until at least January 2035
Compliance	For a full list of local and regional product approvals, please visit pip.raspberrypi.com

Mechanical specification



Safety warnings

To avoid malfunction or damage to this product, please observe the following:

- Any external power supply used with Raspberry Pi 500+ shall comply with relevant regulations and standards applicable in the country of intended use.
- This product should be operated in a well-ventilated environment and should not be covered when being operated.
- The connection of incompatible devices to Raspberry Pi 500+ may affect compliance, result in damage to the unit, and invalidate the warranty.
- All peripherals used with this product should comply with relevant standards for the country of use and be marked accordingly to ensure that safety and performance requirements are met. These articles include, but are not limited to, mice, monitors and cables when used in conjunction with Raspberry Pi 500+.
- The cables and connectors of all peripherals used with this product must have adequate insulation so that relevant safety requirements are met.
- Prolonged exposure to direct sunlight may cause discoloration.
- Do not expose to water or moisture whilst in operation.
- Do not expose to heat from any source; Raspberry Pi 500+ is designed for reliable operation at normal ambient temperatures.
- Take care whilst handling to avoid mechanical or electrical damage to the computer.





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