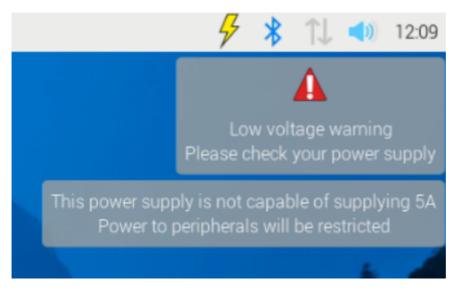
## 3. Power supply of Raspberry Pi 500

## This section mainly introduces the power supply related to Raspberry Pi

Raspberry Pi produces two different USB-C power supplies. The first is the Raspberry Pi 15W USB-C power supply, which is the recommended power supply for Raspberry Pi 4 and Raspberry Pi 400. The second is the Raspberry Pi 27W USB-C power supply, which provides up to 5A current at +5.1V and is the recommended power supply for Raspberry Pi 5 and Raspberry Pi 500.



Although the nominal power of mobile phone chargers that support USB-PD exceeds 15W, they are actually achieved by increasing the voltage instead of providing more current at +5V voltage. If the power supply you use cannot provide 5A current at +5V voltage when it is first started, the operating system will warn you that the current consumption of peripheral devices will be limited to 600mA.

The following table shows the USB-PD power modes required to power various Raspberry Pi models.

Model	Recommended power supply (voltage/current) Raspberry Pi power supply	
Raspberry Pi 5	5V/5A, 5V/3A limits peripherals to 600mA	27W USB-C power supply
Raspberry Pi 4 Model B	5V/3A	15W USB-C power supply
Raspberry Pi 3 (all models)	5V/2.5A	12.5W Micro USB power supply
Raspberry Pi 2 (all models)	5V/2.5A	12.5W Micro USB power supply
Raspberry Pi 1 (all models)	5V/2.5A	12.5W Micro USB power supply
Raspberry Pi Zero (all models)	5V/2.5A	12.5W Micro USB power supply

- 1) Use the official power supply 5V/5A DC power supply. 5V/3A will limit the current of peripheral devices to 600mA;
- 2) Power through the GPIO interface. The GPIO interface of the Raspberry Pi can also accept DC input;
- 3) Through the POE function interface, just add a POE Ethernet module and use an Ethernet cable to power the Raspberry Pi.