

Module13.2 PPS

About This Chapter

Module13.2 PPS is a programmable power supply module. This module adopts STEP-DOWN buck technology and supports a wide voltage DC 9 ~ 36V input range. Built-in with an STM32 control processor and AD8418 high-resolution current amplifier, it achieves rated output power of 100W (peak 150W) for current and voltage output through high-precision closed-loop control. It can output 0.5 ~ 30V/0 ~ 5A, with a readback accuracy of $\pm 30\text{mV}/5\text{mA}$.

This chapter introduces the method to operate rated current and voltage output by stacking Module13.2 PPS with Core/Core2/Core3 series hosts.



Burn Firmware

1. According to your operating system, click the button below to download the corresponding M5Burner firmware burning tool.
Extract and open the application.

Software Version	Download Link
M5Burner_Windows	Download
M5Burner_MacOS	Download
M5Burner_Linux	Download

2. Double-click to open the Burner burning tool, and find the Demo of Module13.2 PPS corresponding to your host. The Demos for Core/Core2/CoreS3 are as follows:
 - o Demo for Core:

CORE

CORE2 & TOUGH

CORES3

TABS

STICKC

ATOM

ATOMS3

STICKV & UNITV

T-LITE

CAMERA

PAPER

COREINK

STAMP

STAMPS3

CAPSULE

DIAL

Search

Only Official

MESHTASTIC

Core1 + Module LoRa868 v1.2

NSS: G5
BUSY: G2
RST: G13
IRQ: G35

Meshtastic for Core1 + Module LoRa868 v1.2

Before use, set the DIP switch IO on the Module LoRa868 v1.2 to the following configuration.
NSS: G5
BUSY: G2
RST: G13

M5Stack
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Download

Module13.2 PPS For Core1

Module13.2 PPS For Core

Module13.2 PPS User Demo. Using the Module13.2 PPS requires an external DC 9 ~ 36V power supply, otherwise it will indicate no I2C device and the device will not work. The maximum output value depends on the output capability of the input DC power supply.

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Remove

Burn

LovyanLauncher

M5Stack Tools & Application Launcher

v0.2.3-16MB

◦ Demo for Core2:

CORE

CORE2 & TOUGH

CORES3

TABS

STICKC

ATOM

ATOMS3

STICKV & UNITV

T-LITE

CAMERA

PAPER

COREINK

STAMP

STAMPS3

CAPSULE

DIAL

Search

Only Official

Core2 + Module LoRa868 v1.2

NSS: G33
BUSY: G32
RST: G19
IRQ: G10

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M5 DAPLink For Core2

M5 DAPLink Firmware for Core2

M5 DAPLink Firmware for Core2
SWDIO: G27
SWCLK: G19
RESET: G32
How to use: https://docs.m5stack.com/en/guide/develop_tools/daplink

M5Stack
Published At: 2025-03-27

Download

Module13.2 PPS For Core2

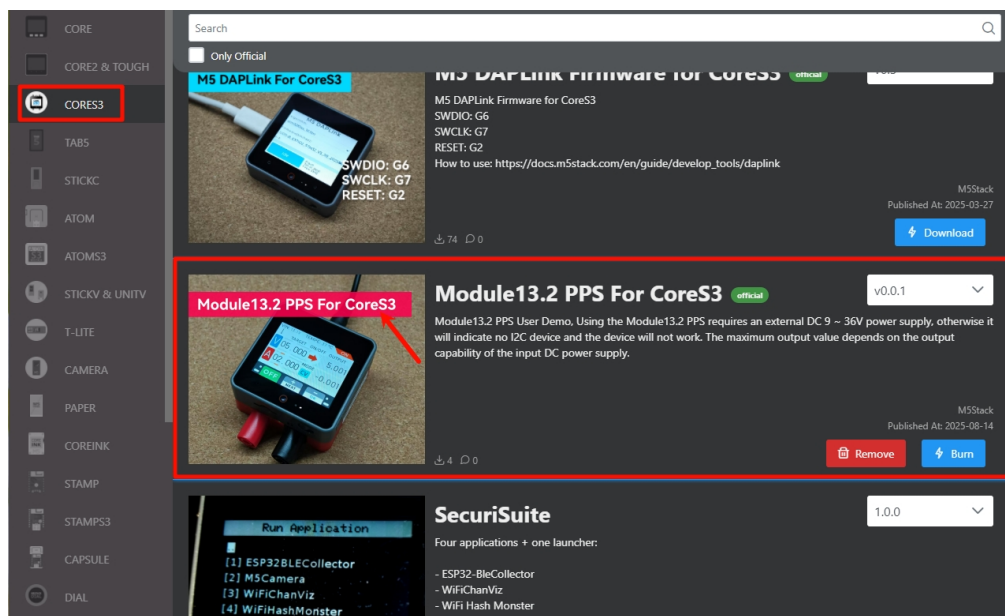
Module13.2 PPS For Core2

Module13.2 PPS User Demo. Using the Module13.2 PPS requires an external DC 9 ~ 36V power supply, otherwise it will indicate no I2C device and the device will not work. The maximum output value depends on the output capability of the input DC power supply.

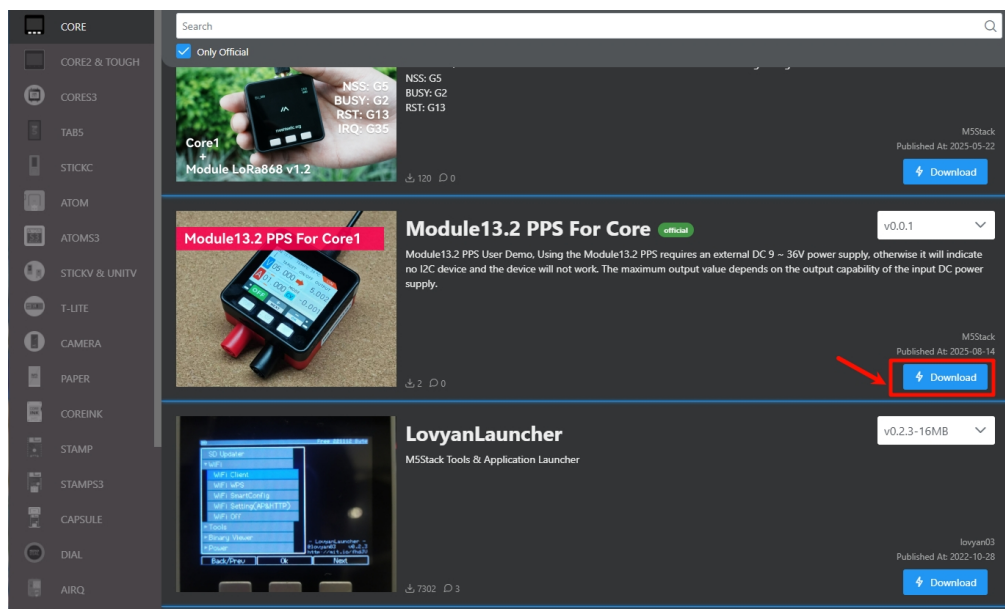
M5Stack
Published At: 2025-08-14

Download

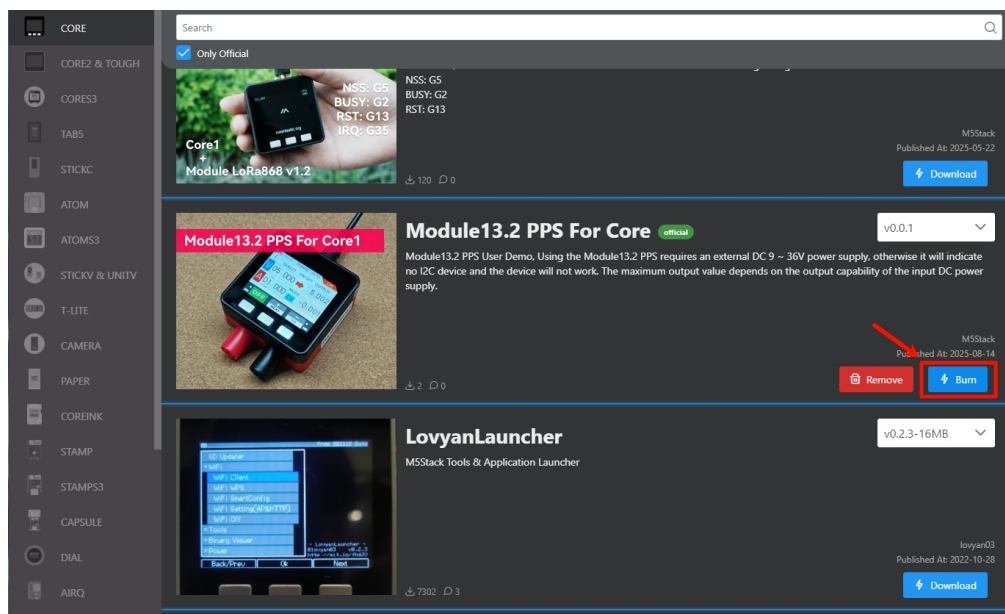
◦ Demo for CoreS3:



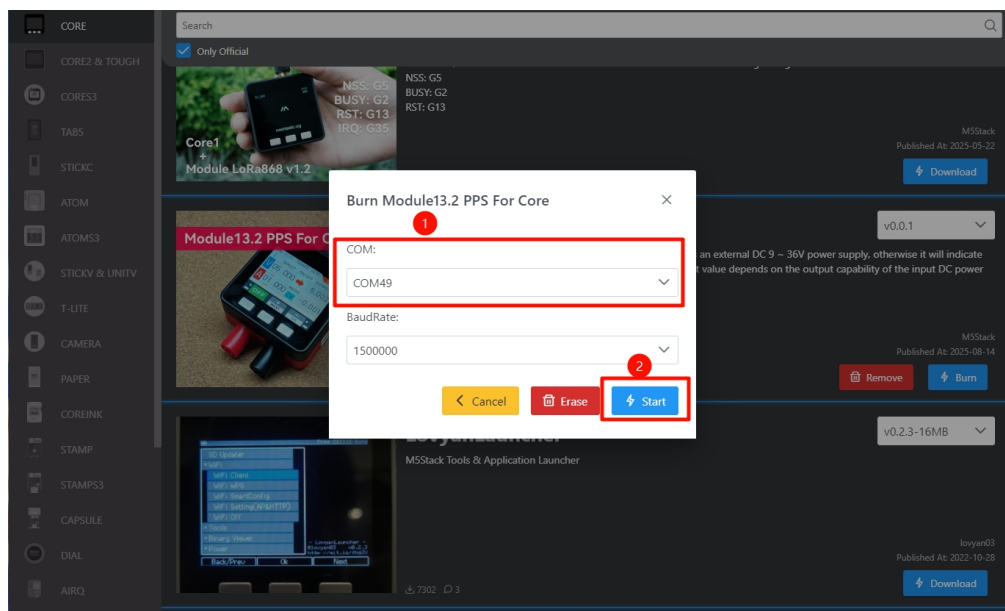
3. Click Download to download the Demo compatible with your host.



4. Connect the device to the computer via USB cable, and click the Burn button for the corresponding Demo.



5. In the pop-up window, select the port corresponding to your device, and click **Start** to begin burning.

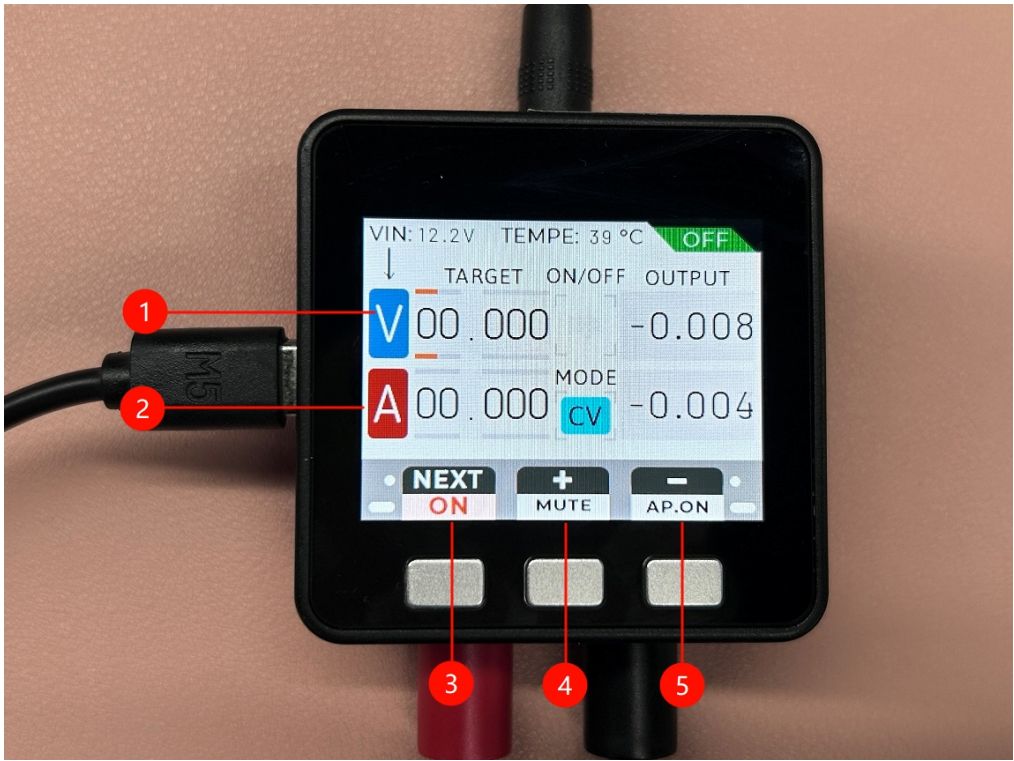


After the firmware burning is completed, the device will automatically enter the current and voltage setting page, as shown below.
Press any key to enter the setting mode.



Learn

The current/voltage setting interface is introduced as follows. Core operates via the buttons on the device, while Core2/CoreS3 operates via the touchscreen buttons. The operational effects are the same.



- 1: Set Voltage
- 2: Set Current
- 3: Switch option / Long press to confirm
- 4: Increase value
- 5: Decrease value

For example, the diagram below demonstrates setting a rated output voltage of 5V and output current of 5A. The left side of the interface shows the rated values set. After adjusting using the increase/decrease buttons, long-press **ON** to confirm and start output. The **OUTPUT** values on the right indicate the device's actual current output voltage/current.

[PP2.mp4](#)

Note

Using Module13.2 PPS requires an external DC 9 ~ 36V power supply, otherwise an "No I2C device" message will be displayed and the device will not work. The maximum output depends on the capacity of the input DC power supply.