

Table of Contents

Camera setup for PrusaLink / Prusa Connect	3
.....	
Step 1 - Introduction: Prusa Connect options	5
.....	
Step 2 - Introduction: Prusa Link options	6
Step 3 - Phone with a camera	7
Step 4 - Phone with a camera	8
Step 5 - RPi camera via CSI	9
Step 6 - RPi camera via CSI	10
Step 7 - RPi camera via CSI	11
Step 8 - RPi camera via CSI	12
Step 9 - RPi & USB camera	13
Step 10 - RPi & USB camera	14
Step 11 - PrusaLink RPi camera setup	15
Step 12 - Camera linked to Prusa Connect	15
.....	

Camera setup for PrusaLink / Prusa Connect




help.prusa3d.com/g470943

**Scan the QR code to
display the latest
version of this
chapter.**



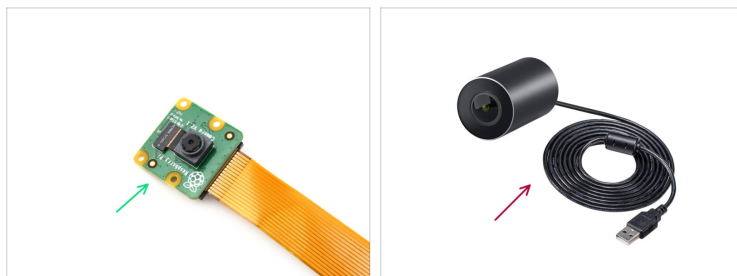
STEP 1 Introduction: Prusa Connect options





 This guide outlines the **camera options** for Prusa Connect and PrusaLink


- The Camera options for **Prusa Connect** are:
 - **Phone with a camera** / or a computer with a webcam connected to internet and linked with Prusa Connect.
 - Prusa Connect's Open API enables third-party options, including:
 - **Buddy3D Cameras**. See the dedicated article or the bundled Instructions.
 - Such as the **ESP32 Cam** firmware by *Miroslav Pivovarsky*. See the respective GitHub repository.
 - or **ESP32-S3-EYE Camera**. See the ESP Camera setup guide.


STEP 2 Introduction: Prusa Link options



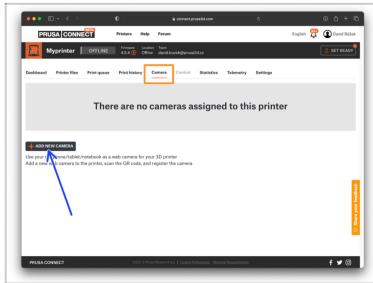
 Following options are available for **PrusaLink** and **Prusa Connect** on **i3 series printers** only (MK2.5/S MK3/S/+):

-  **RPi camera** connected via **CSI** directly to Raspberry Pi or Raspberry Pi Zero running PrusaLink / Octoprint
-  **USB Webcam** connected to Raspberry Pi running PrusaLink (or RPi Zero using USB OTG adapter)

 Alternatively, these options are also compatible with RPi + Octoprint on MK4 / MK3.9 / XL printers

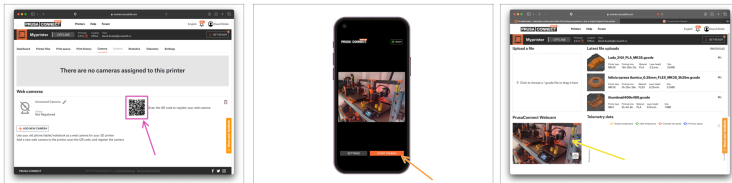
 **Continue to the next steps to explore the options one by one.**

STEP 3 Phone with a camera



- In these steps, will check out the first way to assign a camera to one of your printers in **Prusa Connect**:
- **Using a phone as a webcam.**
 - 📌 Or any computer with a webcam and a web browser.
- ① This method is compatible with **all the printer models** available in **Prusa Connect**.
- Navigate to [Connect.prusa3d.com](https://connect.prusa3d.com), open up the **printer details page** for one of your printers.
- Open up **Cameras** page.
- Click + **ADD NEW CAMERA**

STEP 4 Phone with a camera



- ◆ On the phone you are going to use as a webcam, open up the link either by clicking the QR code or scanning it.
- ◆ On the phone, click the **START CAMERA** button to start streaming the image to Prusa Connect.
- ◆ The camera image will appear in the Printer details page in Prusa Connect, in the Cameras page for the given printer as well as in the printer thumbnail.

STEP 5 RPi camera via CSI



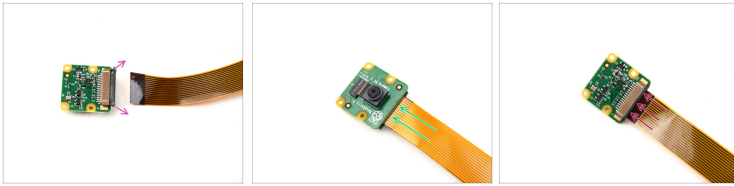
- ◆ As a next option, in the following steps, we will install the **RPi camera** connected to Raspberry Pi using the **CSI** port.
- ◆ This setup is compatible with any of the printers that need to run **PrusaLink** on a Raspberry Pi, which are the Original Prusa **MK2.5, MK2.5S, MK3, MK3S, MK3S+**.
- ⓘ Alternatively, this setup is also compatible with RPi + Octoprint on MK4 / MK3.9 / XL printers.
- ⓘ See also: Camera compatibility
- ◆ These cameras can be connected to the RPi 3,3+,4, or RPi Zero W and Zero 2.

STEP 6 RPi camera via CSI



- **For the following steps, please prepare:**
- **Raspberry Pi CSI camera**
 - Supported versions are: Pi camera 1.3, 2, 3 / NoIR / Wide
- **CSI cable for Pi camera** (get a compatible version for your Raspberry Pi)
 - RPi Zero CSI cable has a narrower connector on the RPi side.
 - Standard RPi CSI cable has same connectors on both sides.
- **RPi camera holder and cover** of your choice (you can print one from [Printables.com](https://www.printables.com))

STEP 7 RPi camera via CSI



- ◆ Pull the locking part out on the camera's connector.
- ◆ Plug the cable into the connector. Orient the cable so that the conductive pads are facing the pins in the connector.
- ◆ Make sure the cable is fully seated in the connector. Then, press the locking part of the connector to fix the cable in place.

STEP 8 RPi camera via CSI



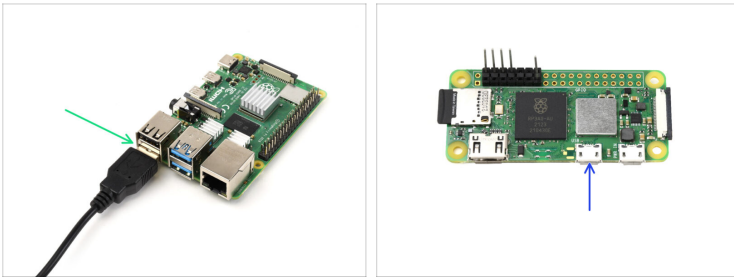
- ◆ Remove the RPi from your printer.
- ◆ Pull out the locking part on the RPi camera connector.
- ◆ Insert the CSI cable into the **camera connector** on the RPi.
- ⓘ On RPi Zero, the camera connector is smaller than on the RPi 3/3+/4 board.
- ◆ Orient the cable so that the conductive pads are facing the pins in the connector.
- ◆ Make sure the cable is fully seated in the connector. Then, press the locking part of the connector to fix the cable in place.
- ◆ Install the camera into a case and attach it onto a holder. Re-wire or re-attach the RPi back onto your printer.
- ◆ Skip to the **PrusaLink RPi camera setup** step to configure the camera.

STEP 9 RPi & USB camera



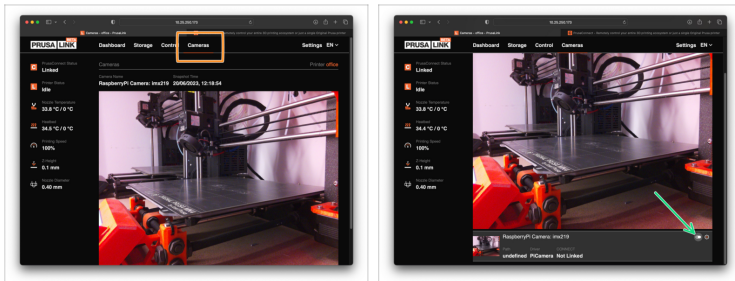
- ◆ As a next option, in the following steps, we will connect a USB camera to Raspberry Pi running PrusaLink.
- ◆ This setup is compatible with any of the printers that need to run **PrusaLink** on a Raspberry Pi, which are the Original Prusa **MK2.5, MK2.5S, MK3, MK3S, MK3S+**.
- ⓘ Alternatively, this setup is also compatible with RPi + Octoprint on MK4 / MK3.9 / XL printers
- ⓘ See also: Camera compatibility
- ◆ USB camera can be connected to the RPi 3,3+,4 directly or using USB OTG adapter to RPi Zero W and Zero 2. Do not use the microUSB plug on RPi Zero labeled PWR.

STEP 10 RPi & USB camera



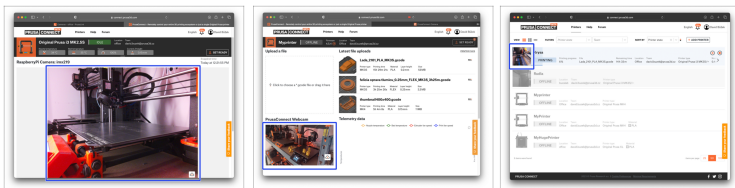
- Power down the printer and the RPi.
- Connect the camera's USB cable into a free USB port on the RPi.
- In case you're connecting the camera to RPi Zero using USB OTG adapter, use the microUSB plug labeled USB, **NOT** the one labeled PWR_IN.
- Re-wire or re-attach the RPi back onto your printer.

STEP 11 PrusaLink RPi camera setup



- Connect the printer with the RPi back together and turn it on.
- Open up PrusaLink in your browser, log in.
- Visit the **Cameras** tab
- Below the camera image, there is a **Link camera to Connect** button. Turn this function on.

STEP 12 Camera linked to Prusa Connect



- The camera image will appear in the Printer details page in Prusa Connect, in the Cameras page for the given printer as well as in the printer thumbnail.
- If you want to explore more about the Prusa printer remote control services, visit the Prusa Connect and PrusaLink explained article.
