

FAQs

Do I need an external antenna? Is it included with the product?

Yes and yes, this board has no on board antenna however a u.FL antenna is provided in the box.

Which Arducam models are compatible with the on board camera connector?

The camera adapter (J6 header) is a 20 pin adapter for Arducam cameras such as OV7675 and OV7670. For more information on how to use the camera visit the [GIGA R1 WiFi Camera guide](#).

What is the difference between the Portenta H7 and the GIGA R1 WiFi?

The difference between these two products are:

- The GIGA R1 WiFi uses the USB-C® to power and program the board, as well as simulate an HID device such as mouse or keyboard. In the case of the Portenta H7, the USB-C® can also be used as DisplayPort out, USB Hub or to deliver power to OTG connected devices.
- The GIGA R1 WiFi exposes all the possibilities of the STM32H7 in a more accessible way using 2.54 mm pin headers making it a more suitable option for prototyping whereas the Portenta H7 is suitable for mass production since it uses high-density connectors to save space.
- Given its form factor the GIGA R1 WiFi has the space to provide additional services such as a USB-A connector, 3.5mm input-output jack and JTAG connector on board.

What shields are compatible with GIGA R1 WiFi?

Any shield with the UNO, Mega or Due form factor that supports 3.3V is supposed to work with GIGA R1 WiFi but we recommend checking with the manufacturer. The following shields (and their libraries) are officially compatible with GIGA R1 WiFi:

- Arduino Ethernet Shield Rev2
- Arduino Motor Shield Rev3
- Arduino 4 Relays Shield
- Arduino 9 Axis Motion Shield

What is the difference between the two USB connectors?

The GIGA R1 WiFi has two USB connectors. The USB-C® connector (USB0), next to the reset button and the u.FL antenna connector, is used for programming, serial communication and 5V

power. The USB-A connector (USB1), next to the 3.5mm jack connector, is used as a USB host (not a programming port).