

Cluster HAT

Can the Pi Zero 2 W be used in the Cluster HAT?

For light/average use the Cluster HAT should work OK with four of the newer Pi Zero 2 W, the main thing to be aware of is the potential power consumption.

We've taken the following measurements with a Ethernet connected Pi 4.

Idle Pi 4 ~2.4 Watts and ~5.8 Watts running stress.

Idle Pi Zero 2 W ~1.3 Watts and ~3.4 Watts running stress.

Idle Pi Zero ~1.3 Watts and ~1.6 Watts running stress.

Which means a Pi4 and 4xPi02W could use between ~7.2 Watts when idle and ~19.4 Watts with all 5 machines running stress.

The 19.4 Watts is higher than the official Pi 4 Power supplies rating of 15.3 Watts (vs the Pi4+4*Pi0 ~7.6 to ~12.2 Watts).

For those running lighter or non-concurrent loading - say a Pi4 running stress, two idle Pi02W and two Pi02W running stress the power usage (15.2 Watts) fits within the rating.

Please remember peripherals such as USB Flash drives, Cameras, Mouse, Keyboards, using WiFi, overclocking, etc. will all require more power.

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