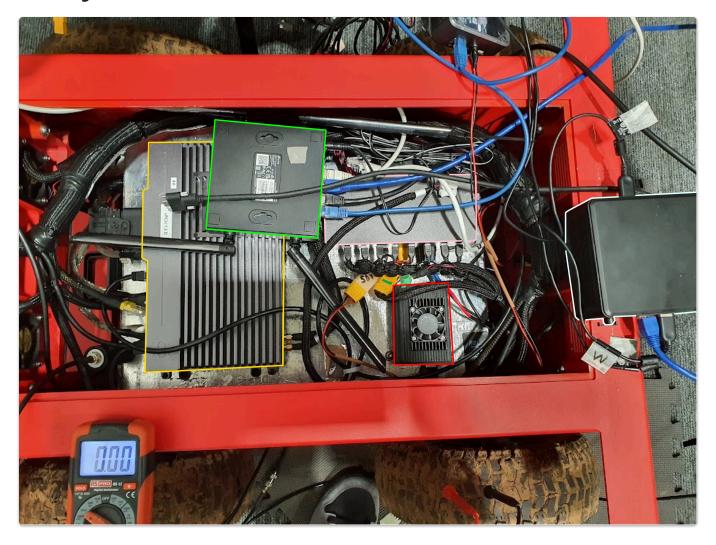# Antobot Power Documentation

> ⓘ **Info**
>
> The NUC on board the Antobot needs to be powered seperately to the rest of the subsystems given the voltage range. This doc gives an overview of the changes made to incorporate it.

Subsystem Power Details

Item	Voltage	location / colour	Notes
Battery	48-52 v approx.	Lower deck (not shown)	

Item	Voltage	location / colour	Notes
NUC	19-24 v	Lower deck, shown in light blue	
Power Delivery Unit (PDU)	vbat	Light pink	Provides power to other systems
uCRU	powered by PDU	Yellow	Handled by PDU, doesn't need discussion here
Jetson	12 v	Red	Powered by screw terminal socket. Temporarily removed (28th Jan 24)

Added Systems

We have added a 13th Generation Intel NUC, which takes 19-24v and consume ~100W at full power. This can't be directly powered by any existing subsystem, so a Meanwell SD-150C-24 24v regulator has been added. The 50v line from the PDU turned out to be incompatible - so an additional 12v relay is needed to switch the lines between the Meanwell and battery on and off. For the relay, a generic 24-220v, 100A unit has been chosen.

The new schematic is shown below. All the additional subsystems are on the lower deck of the Antobot.