I've seen a lot of questions in other groups about series unregulated mods vs parallel unregulated mods, and I'm going to break down the differences in as factual a manner as I can. I have my own ideas about what is better, but I'd rather drop some numbers on you first and let you make your own decision.

First and foremost, regardless of what you've seen anywhere else, neither setup will necessarily give you better battery life. At the same wattage, the battery life is...wait for it...**exactly the same**. We talk a lot about mAh, or milliamp-hours. We use that as the de facto standard for measurement of battery life. If all batteries were the same voltage, that would be okay. But when we throw a different voltage into the mix, we need to shift to talking about watt-hours, especially since the watts are what we're using to make those sweet, sweet clouds. Note that mAh doubles with two identical parallel cells, whereas voltage doubles with two identical series cells. Let's look at the numbers.Watt-hours are amp-hours times volts, so we do this for a series and parallel setup using 2500mAh cells:

(parallel) 5000mAh x 4.2V = 21,000mWh

(series)   2500mAh x 8.4V = 21,000mWh

End of story. Well, not quite. People have asked me about run time due to voltage drop in one setup or another. I'll show you exactly how that works while setting up my next section regarding build resistance.

So we'll call the usable voltage range of a Li-Ion cell 4.2V to 3V. Argue with me about that all you want, but this is just for the sake of showing you numbers. This will work at whatever voltage range you like. Parallel setups are the same, whereas series setups go from 8.4V to 6V using the same standard. So here we go...

A parallel setup will start here on a .5 ohm build:

V: 4.2
A: 8.4
Ω: .5
W: 35.28

And it will end here:

V: 3
A: .5
Ω: .5
W: 18

Okay, now let's see how that starts with a **watt-equivalent** build in series.

V: 8.4
A: 4.2
Ω: 2
W: 35.28

It ends with:

V: 6
A: 3
Ω: 2
W: 18

Again, it's the same damn thing done two different ways. Did you notice how different the two resistances were? No shit, a 2Ω build on a series setup will hit like a .5Ω build on a parallel setup. That changes even more if you do a 3x series setup. If you aren't comfortable wrapping a lot or using a higher gauge wire, keep reading. I have more to say.

One last thing. I want to talk about conductor loss. In the electrical industry, it's well-known that higher current causes more resistive losses. It's calculated by current squared times resistance and gives watts. So let's say you're running a parallel setup at a full 60A like I know some of you try to. I'll call the losses in all the parts of the mod .05Ω for the sake of demonstration. Your mod may be better or worse.

Watts lost in the mod: 3600A x .05 = 180W
Watts to atomizer (assuming .02 coil) = 72W

Total watts generated: 3600A x .07 = 252W
4.2V^2/.07=252W
4.2V x 60A = 252W

Fuckin' wow, right? That's a lot of damn watts lost. Now if you use big wire, great battery connections and a MOSFET, you can end up with less losses. But that's a different discussion. Let's see what happens when you max a series setup. Same principle, but we max out at 30A.

Watts lost in the mod: 900A x .05 = 45W
Watts to atomizer (assuming .23 coil) = 207W

Total watts generated: 900A x .28 = 252W
8.4V^2/.28=252W
8.4V x 30A = 252W

Well the losses are still there, but look how much more of the wattage generated gets to the atomizer. That's no small deal, so consider it when choosing what to build.