

Putrid_Upstairs Response

Best bet might be a Skywalker V1 or V2 for the price you want to maintain.

Electric drum roaster (not hot top, I want precise repeatable control and proper temperature logging)

V1 has temperature logging done through either the use of Arduino Nano or ESP32-S3. The V1 firmware was developed by the community and made to work with Artisan and HiBean. We have implemented a PID library but needs some tuning. I do find that Hibeans power tracking, which is basically event replication, worked just as well recreating a past roast by following heat and air changes made during the roast.

Batch size: around 400-500 grams

V1 and V2 can do 500g but users like the 350g to 450g range.

Should be able to handle a few back-to-back roasts without overheating or needing long cooldowns

V1 with heatsink mod is highly recommended where the V2 already has this installed. There are still a few people roasting back to back with the heatsink mod which is a little concerning. Then there is also putting running 40kg+ a month on a V1 which is not recommended.

Temperature logging support (built-in or compatible with Artisan / similar software)

V1 doesn't have it built-in but the community basically taking all the bit banging going on in the roaster and converting that info into TC4 protocol to communicate with Artisan and HiBean. V2 has a serial usb option to connect to a PC and has Classic Bluetooth module that communicates with Artisan and HiBean (Android only at this time). No hardware PID in V2 they straight marketed that and ended using Artisan software PID with no shame.

Budget: up to \$1,000 USD (open to used options if they're solid and parts are available)

V1 can be purchased for \$450. V2 at around \$720. The Skywalker parts readily available on Aliexpress. Community has also found places to source most of the consumable parts like lamps (FIR vs NIR), bearings, fans, and drum motors in case they ever stop producing them. We even have an open sourced controller board designed by a community member just in case.

Prefer something that's durable, consistent, and gives a realistic feel of commercial drum roasting

That's hard to come by you would need to save up to \$2k or more and get something like a Cormorant, Kaliedo or Bullet.

Which models you'd recommend (and why)

V1 and like extra \$20 in mods gets you a pretty great setup for roasting staying well under \$1k.

Pros/cons of electric drum roasters you've used

Kaliedo M2 awesome build quality, pretty design and lots of happy users out there. It just cost so much more and I get similar results to my V1. Also if you are out of warranty and that controller board dies that will cost \$400USD to replace. I would upgrade to a M10 for sure before getting a M2.

Smola S5 another decent sub \$800 500g roaster. Build quality is better than the Skywalker lots of metal but design aesthetics is Spartan. Still early needs lots of revisions like the switching metal parts to wooden so they wont burn your hand when roasting. The internal Bean Cooling Fan is worse than the Skywalker. Heat lamp is out of the drum so it's more similar to a Kaliedo convection dominant roaster than a radiant dominant roaster like a Skywalker. It also connects to Artisan and Hibeans off the bat (firmware updated required).

Kaffelagic Nano 7. I paid \$1k and it's cool for what it is. Set a profile and it roasts. Roasts come out great but only 150g batches. Also I have a little more fun manually roasting managing things like heat% and air exhaust. I feel like I learn more on a Kaliedo or a Skywalker. Especially both have triers great ways to monitor progress of your roast by seeing and smelling.

Skywalker V1 and V2 (All Cons). Right away the build quality is sub par when compared to a Kaliedo or Bullet. This V1 feels like it had two design philosophy in mind. 1) How can we build a decent roaster at a production cost of \$150 2) How can I make it look cool (old marketing went heavy on the Vader images). Things like thermal runaway was a big problem in first batch of V1. They eventually added some extra safety fuses and relays to the board which work and eventually added a heatsink fan to V2. Drum motor does have some issues especially with back to back roasts. Not just one or two but like 5 hour sessions the internal gear is made of some plastic. We did source a similar motor with all metal gears and there is a brushless version of the motor that can be added to the V1 with some tinkering. Also the V1 controller and V2 tablet are pretty bad. The 1Kg version of the Skywalker is the only one with a decent controller.

What software/hardware setup you use for logging

HiBeans mostly they have large release coming out soon where community can share their profiles.

Like <https://www.roastetta.com/>

Any accessories or modifications that improve consistency (e.g. probes, airflow tweaks, etc.)

For my V1 I was able to get probes like a K style TC and a PT100 RTD swap out the our NTC probe (you still need to use proper MAX Amplifier and the right firmware to use).

If you have any questions or want to talk over Discord Video Stream feel free to find me on our

[Skywalker Community Discord](#)

If you are in Northern California you can take one for a spin. We had a Roast It Forward program but shipping became too prohibited and didn't get enough feedback from the first two people who were picked.

