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Thread: [ph meter and/or other sensor \(re\)calibration](#)

Faith Connors - May 29, 2023, 4:19 pm

so my summer project this year is building a hydroponic garden. so far, it's been a lot of fun cementing pvc, setting up all the pumps, and i'm now germinating the seeds.

right now, while everything is still just starting up, it's very hands-on and i'm doing everything myself.

the endgame goal is to use whatever iot sensors i can get my hands on to do all the maintenance for me throughout the day.

for instance, if the nutrient concentration gets low (checking electroconductivity and ppm) then it can dispense some more nutrients into the reservoir.

likewise, if the ph gets too high (or too low), it can dispense some ph- or ph+ solution into the reservoir to balance it out.

i was playing around with ph today for germination, and i found that my ph meter was really badly uncalibrated.

nothing i couldnt fix with about three minutes of work, but it got me thinking:

how often would i need to recalibrate an embedded ph sensor?

likewise, do any of the other sensors need recalibration, and how often would i need to actually maintain the system? (temperature, humidity, EC, etc)

like, would high humidity affect the accuracy of the temperature sensor?

what variables should i consider in recalibration frequency?

ive never used any of these kinds of sensors before and have no experience with any of them :/
(i do have experience with all the fun embedded stuff, though, so its nothing i cant figure out eventually.)

if you have any experience with this kinda stuff, drop your input here.

naturally, im fine with having to quarter-turn a potentiometer every few days, but i just want to set myself up with some actually-realistic expectations.

edit:

no im not growing weed (at least yet)

im growing all kinds of yummy chili peppers first :3 and some cilantro, basil, swisschard, etc.

Faith Connors - May 29, 2023, 5:44 pm

i will when i have pictures worthy of sharing:)

right now ive only taken pictures for some of my (close) friends that are interested in my personalblogging daily updates

but i will probably document the iot part of it in here once i actually reach that stage, still have to do a few more things with pvc, tubing, and the reservoir.

heisenberg29 - *November 20, 2023, 5:43 am*

Depends on which kind of PH meter you are using, how you store it and how long since you last used it.

If it's a cheap PH meter from Amazon, you need to recalibrate it every time you use it and it won't last very long, nor will it be very accurate.

On the other hand, a good PH meter that was properly stored can possibly last a few weeks/months before having to re-calibrate it.