

UPLIFT SOLAR CORP.

Sun Tracking Control from Inside the Solar Panel

Reducing the hard and soft costs of single- and dual-axis tracking for solar.

TECHNICAL ASSISTANCE REQUEST:

In order to develop its embedded sensor, motor, and charge controllers for axis-tracker motors, Uplift will need advice on options for motors of different sizes and the tracking algorithm.

Uplift is aware that the National Laboratories house expertise in the computational processes that enable and optimize solar power production. Uplift would explore and hope to partner with one or more national labs to find an appropriate tracking algorithm that may be edge processed inside the solar module. It also foresees that its power electronics, once on site, can "learn" certain aspects of the site conditions before the panels are commercially producing power, which would create certain baselines needed by the algorithm.

From a hardware perspective, Uplift foresees the potential to optimize the tracker motor choice with the Uplift motor controller to minimize parasitic power consumption. Uplift will look within the American-Made Network for manufacturers of axis trackers who are willing to consider and test the possibility of smaller motors.