



Optivolt Solar Prize Round 7 Technical Assistance Request

Optivolt is seeking assistance from organizations conducting work in the following areas:

- Module degradation / lifetime / reliability research: hotspots, bypass diode failure
- Installation (residential/commercial)
- Module Level Power Electronics (MLPE) testing
- Residential PV energy yield research
- Residential PV energy yield simulation
- PV extended lifetime & bankability testing

If applicable, please reach out to daniel@optivolt.com. We would particularly appreciate outreach from national labs interested in collaborating on research!

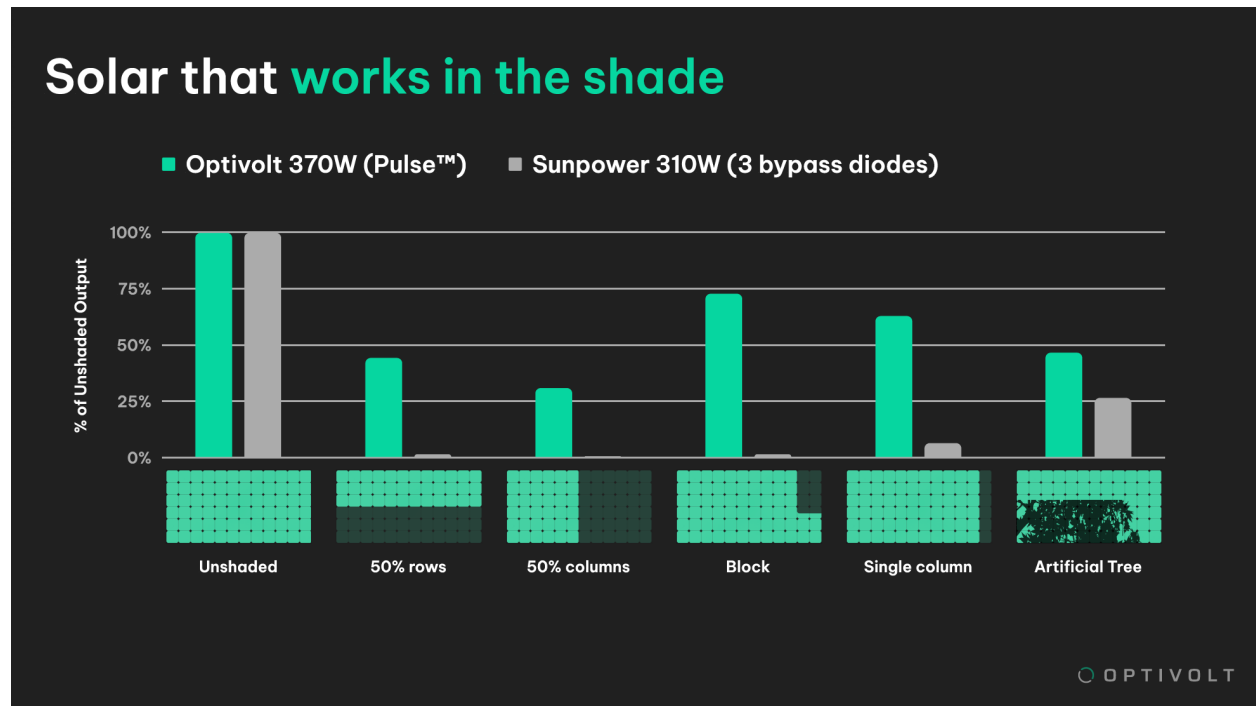
About Optivolt

Optivolt's patented electronics architecture, Pulse™, can harvest power from both partly shaded and unshaded areas of a solar panel, delivering superior performance in any scenario. Pulse™ shade tolerance technology is battle-tested by U.S. Homeland Security and Ukrainian front-line units to reliably provide mission-critical power where traditional solar falls short.

Optivolt's new Pulse™ MLPE solves the two biggest issues with solar panels:

- **Disproportionate power loss** under sweeping shade, partial coverage with snow, dirt or debris, other minor obstructions
- **Early failure** due to hotspot formation or burnt bypass diode, the two leading causes of PV module failure

We are currently taking reservations for Optivolt Home, a complete solar + storage + install package featuring Optivolt's 430W module with pre-installed Pulse™ MLPE. Installations begin late 2024.



American-Made Network Assistance

Optivolt is actively seeking National Laboratories or other relevant stakeholders in the American-Made Network that are open to participating with Optivolt Labs in the Department of Energy’s American-Made Challenge SET phase as a Voucher Service Provider.

Optivolt Labs’ design will maximize the energy harvest from photovoltaic modules during shaded conditions, which plagues most residential systems.

We are interested in working with any laboratory or organization that has significant expertise with photovoltaic inverter testing and balance of system testing. Optivolt Labs is looking for support via the Prize Voucher award with the following tasks:

- Characteristic baseline measurement of the shade tolerance PV module
- Conduct relevant UL1703 type testing (high/low thermal stress testing)
- Capture data and report results of outdoor shade tolerance testing