

# Beyond Batteries, Beyond Imagination: LAYER® Lights Up Innovation.



## Towards a Battery-Free Future for Low-Power Electronics

Each year, billions of battery-powered devices flood the market, contributing to our growing carbon footprint and reliance on harmful substances due to manufacturing and disposal.

As consumer demand for eco-friendly products rises and companies prioritize Environmental, Social, and Governance (ESG) standards, reducing battery usage becomes imperative.

### LAYER®

Harvesting energy from ambient light

LAYER® is a printed organic photovoltaic on thin-film that harvests ambient light and turns it into electricity for low-power electronics. It operates in very low-light conditions, while minimizing costs and environmental impact. This ultra-sustainable solution paves the way to a battery-free future, mitigating high deployment costs in the long term.

#### Inkjet Printing

Free-form design for any sensor size & shape.

#### Organic Photovoltaic technology

No rare earths or heavy metals used.

#### Extreme Low-Light

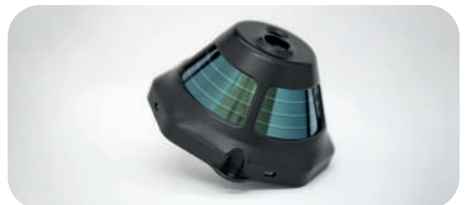
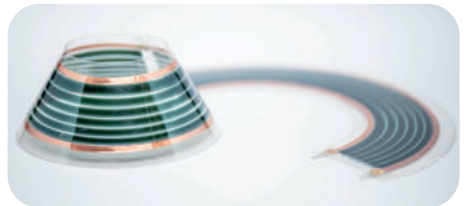
Optimal performance in sub-500 lux conditions.

#### Long Life Span

Durability and sustained performance.

#### Suited for low-power wireless

Ideal for LoRaWAN®, NB-IoT, Mioty, and BLE.



# OPV LAYER®

Our technology harnesses the photovoltaic effect, featuring an organic active layer rich in carbon and hydrogen and utilizing environmentally friendly solvents.

It represents a significant advancement in renewable energies as part of the third generation of photovoltaic technologies.

## Applications across various industries



### Smart Home & Smart Building

- Monitoring
- Energy Management
- Home Control
- Lighting



### Smart Asset Tracking

- Cold Chain Monitoring
- Geotagging



## LAYER®Vault

### Energy Harvesting & Storage in 1

Low-light OPV energy harvesting and electrical storage printed on both sides of one flexible thin film.

- Stores surplus energy for later use, ensuring uninterrupted functionality.
- Seamlessly integrates into diverse applications for ultra low-power devices.
- Eliminates need for having super capacitor.



With a production capacity of 150 million cm<sup>2</sup> printed OPV surface, Dracula Technologies is the largest manufacturer of organic photovoltaic in Europe.



### Contact us to discuss your needs!



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