

# PV Booster™ Dual-Axis Tracker

## Commercial Building Illustrative Solar Installations

### Constrained Roof Area

#### Class B Office Building

16,611 s.f.

Southern California



### Unconstrained Roof Area

#### Dry Warehouse

368,000 s.f.

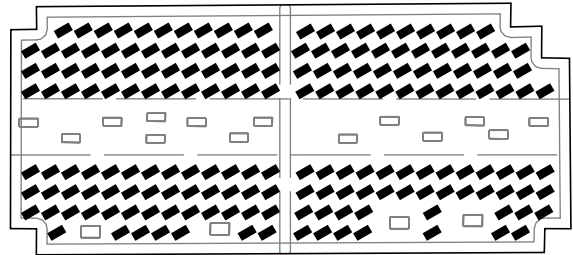
Southern California





### Illustrative Office Building Installation: **Constrained Roof Area**

**Class B Office Building**  
16,611 s.f.  
Southern CA



**Conventional 10° Fixed Tilt System**

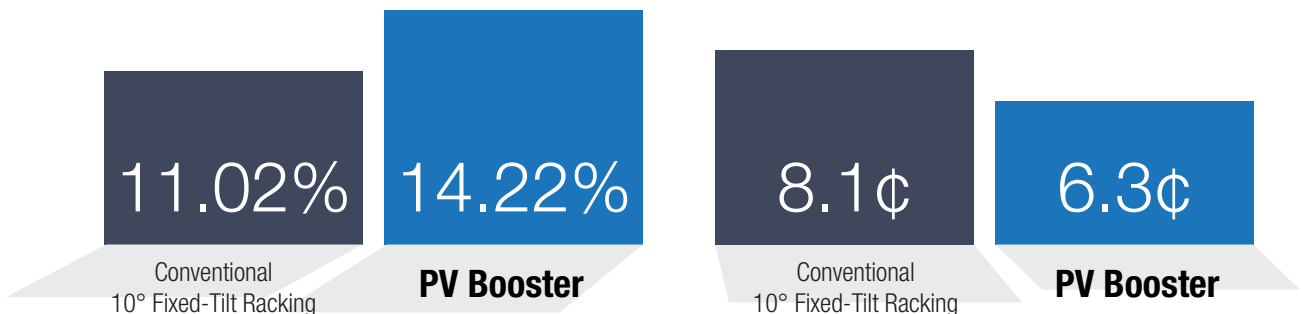
**Edisun Microgrids PV Booster System**

97.5	System size (kW)	66.0
180	Annual output (MWh)	164
202	Annual use (MWh)	202
\$243,745	Total cost	\$173,737
\$2.50	Cost / Wp	\$2.63
6.4	Payback period (years)	5.1
\$0.081	LCOE (\$/kWh)	\$0.063
11.02%	Project IRR	14.22%

### Improvement from PV Booster

Internal Rate of Return (IRR)

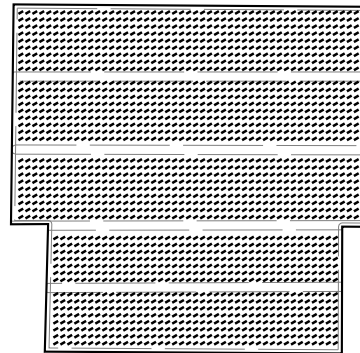
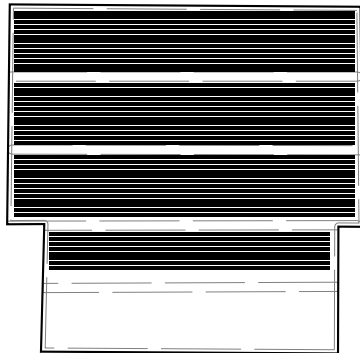
Levelized Cost of Electricity (LCOE)





### Illustrative Warehouse Installation: Unconstrained Roof Area

Dry Warehouse and Distribution Center  
368,000 s.f.  
Southern CA



Conventional 10° Fixed Tilt System

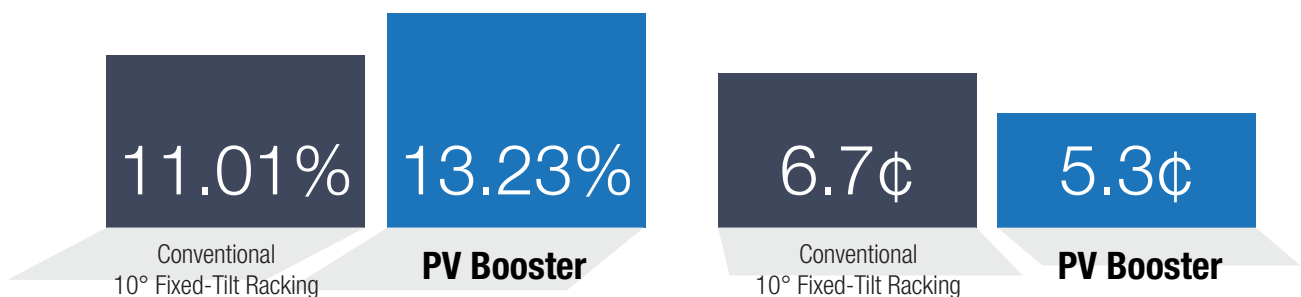
Edisun Microgrids PV Booster System

975	System size (kW)	727
1803	Annual output (MWh)	1810
1810	Annual use (MWh)	1810
\$1,945,734	Total cost	\$1,553,337
\$2.00	Cost / Wp	\$2.14
6.3	Payback period (years)	5.4
\$0.067	LCOE (\$/kWh)	\$0.053
11.01%	Project IRR	13.23%

### Improvement from PV Booster

Internal Rate of Return (IRR)

Levelized Cost of Electricity (LCOE)





## Methodology

Edisun Microgrids has prepared this study to illustrate the energy output and associated economics of a PV Booster dual-axis rooftop tracker system versus a conventional 10° fixed-tilt system. Energy output modelled using NREL PVWatts® / Sandia reference algorithms modified by proprietary shading and backtracking model. Energy savings and IRR modelled using Energy Toolbase™. Building electricity load profiles based on independent third party dataset, OpenEI, for DOE reference buildings. Levelized Cost of Electricity (“LCOE”) calculated without tax incentives using initial cost together with the value of projected annual operating and maintenance costs (“O&M”) divided by the estimated 20-year energy output after module degradation.

### Case Study Assumptions

<b>System Life</b>	20 years, no residual value
<b>Module</b>	72 cell premium 375 Wp
<b>Module degradation</b>	0.50% annually
<b>Inverter Replacement</b>	Year 15
<b>Financing</b>	None (unlevered)
<b>Discount rate</b>	6% p.a.
<b>Tax Rate</b>	39% combined
<b>ITC Rate</b>	30%
<b>Depreciation Method</b>	MACRS
<b>Annual O&amp;M 10° Fixed</b>	\$13 / kWp
<b>Annual O&amp;M PV Booster</b>	\$13.50 / kWp

Independent Third Party Tools used:



The PV Booster technology was developed by Edisun Microgrids, Inc. and is the brainchild of Bill Gross, founder of renowned technology incubator, Idealab. Bill has founded many innovative companies, including several in solar energy such as eSolar®, RayTracker™, Thermata™, and E.I. Solutions™. With its patented technology, Edisun Microgrids is poised to fulfill the commercial industry’s unmet need for solar energy.



Edisun Microgrids™

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