

SOLAR BUS SHELTER LIGHTING

Improves commuter safety in
Pomona, California

LEADSUN

Limitless Light. Beyond the Grid.



Project Snapshot



Location
Pomona, CA



Application
University bus shelter
interior lighting



Systems Installed
3 solar engines, 6 LED
lights



Technology
AE2540L solar engine
with LED Link Lights

Project Implementation

Leadsun Solution

LeadSun delivered a customized solar lighting solution for three bus shelters at California State Polytechnic University, Pomona, where new shelters had no internal illumination and nearby street lighting left commuters in the dark. The site offered no straightforward mounting option: not all shelters had curb-side sign posts, and the shelters' curved roofs required custom-engineered fixings. LeadSun engineered aluminum L-channel brackets that clamped to the existing roof screw pattern, securing a 40-watt AE2540L solar engine with onboard battery atop each of the three shelters. Low-voltage DC cabling connected each engine to two 5-watt LED Link Lights mounted to the shelter ceiling, delivering grid-independent interior lighting with no curb-side electrical access required. Adaptive output runs the lights between 30% and 100%, extending battery life while ensuring students and staff have a well-lit, safer commute after dark.

Project Impact

- ✓ Improved interior illumination at previously dark bus shelters
- ✓ Increased safety for students and staff commuting by bus
- ✓ Custom brackets mounted solar directly to curved shelter roofs
- ✓ Installed without grid power or curb-side electrical access
- ✓ Reliable solar operation independent of inadequate street lighting

System Performance

Custom Roof Mounting: Engineered aluminum L-channel brackets clamped to the shelters' existing roof screw pattern, solving the curved-roof challenge with no structural modification.

Adaptive Output Control: Each solar engine runs its LED Link Lights between 30% and 100%, maximizing battery life while maintaining reliable interior illumination.

Self-Contained Installation: Onboard batteries and low-voltage DC wiring made each shelter fully grid-independent, requiring no curb-side posts or electrical connection.