

VERTICAL 360° SOLAR ENGINE + FREEDOM PLUS LUMINAIRE

Mono360 Prime™

A sleek vertical solar column that
captures sunlight from every direction.

Mono360™ Prime is the sleek, single-stack foundation of the Mono360 vertical solar lighting platform. The vertical 360° solar engine captures sunlight from every direction and connects directly into the Freedom PLUS luminaire, which houses the battery, MPPT controller, and programmable lighting intelligence.

Together, the system delivers reliable year-round performance with precise control over lighting output.



Integrated LED + Battery

Seamless pairing with Freedom PLUS luminaire



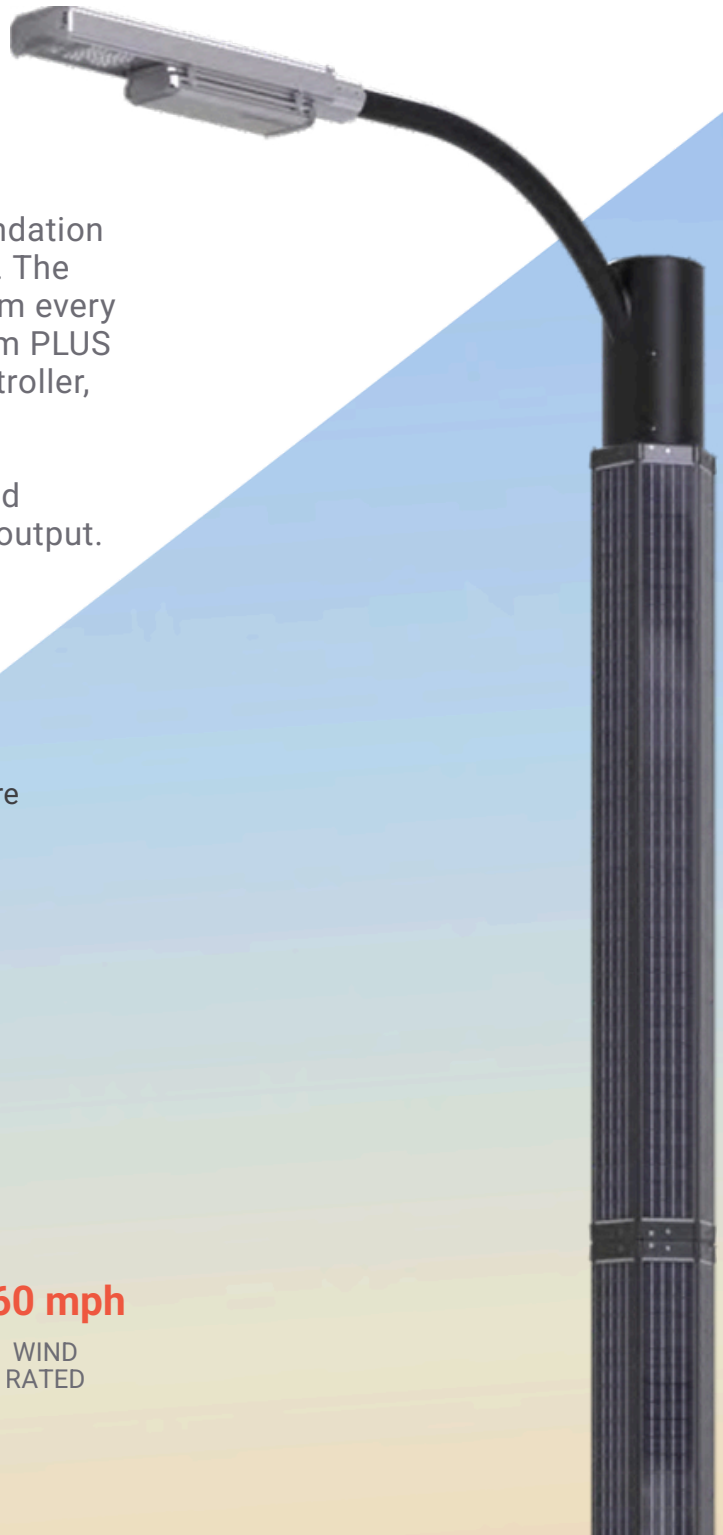
360° Solar Engine

Optimized for low-light environments



Easy Install

Plug-and-play solar engine



Up to
5700lm

LUMINOUS
FLUX

360°

SOLAR
CAPTURE

410 Wh

BATTERY

160 mph

WIND
RATED

Mono360 Prime™

Vertical 360° Solar Engine +
Freedom PLUS Luminaire

Why Vertical 360°

Conventional flat panels capture sunlight from one direction and need careful tilt and orientation. The Mono360 Prime's vertical solar column captures light from every direction throughout the day, and performs in low-light conditions where flat panels fall off.

The column connects directly into the Freedom PLUS luminaire, which houses the battery, MPPT controller, and programmable lighting intelligence. The result is a slim, architectural profile that mounts plug-and-play to any modular pole, with PIR/DISS adaptive dimming and precise control over output year-round.

STEP 1 · CAPTURE

360° Solar Column

Vertical solar engine designed to collect sunlight from every direction with minimal orientation requirements.

STEP 2 · MANAGE

Freedom PLUS Brain

Battery, MPPT controller, and lighting intelligence in one luminaire.

STEP 3 · ILLUMINATE

Programmable Output

PIR/DISS adaptive dimming with programmable 30%–100% working mode.

Core Advantages

- **Integrated Architecture:** Mono360 Prime pairs seamlessly with the Freedom PLUS luminaire.
- **Plug-and-Play Deployment:** The vertical solar module mounts directly to any modular pole.
- **Smart Lighting Behavior:** Freedom PLUS provides PIR-activated adaptive dimming.
- **Minimal Visual Footprint:** A slim, modern solar column with a matching luminaire, unified, simple, and architectural.

Specifications

MECHANICAL	VSPV 150W22-280	VSPV 240W18-280
PV Module Power	156 W	240 W
Battery Capacity	410 Wh	410 Wh
Net Weight - Solar	36.4 lbs	48.5 lbs
Net Weight - Luminaire	8.82 lbs	8.82 lbs
Dimensions - Solar (in)	52 × 11 × 10	75 × 11 × 10
Dimensions - Luminaire (in)	33 × 10 × 8	33 × 10 × 8

MOUNTING

Tenon OD	Fits Standard 2 5/8"
Wind Load Rate	160 mph
Installation Height	16–26 ft
Installation Distance	65–100 ft

LIGHTING Freedom PLUS Luminaire (RS30)

Light Output	30 W
Typical Luminous Flux	Up to 5700 lm
Color Temperature	3000 / 4000 / 5000 K
Motion Sensor	PIR / DISS
Working Mode	Programmable (default 30%–100%)

Applications: Parks, bike lanes, pedestrian routes, HOA streets, campuses, and smaller municipal projects.

LEADSUN

Datasheet Mono360Prime v 05202026