

Datasheet

LEADSUN
Limitless Light. Beyond the Grid.

HIGH-CAPACITY MODULAR VERTICAL SOLAR LIGHTING

Mono360 Ultra™

High-capacity modular vertical solar lighting **engineered for autonomy and scale.**

The Mono360™ Ultra Series represents the high-capacity, modular, commercial, and infrastructure evolution of the Mono360 vertical solar lighting platform. Designed for municipal, commercial, and infrastructure applications, the Ultra Series integrates the solar engine, energy storage, and intelligent control into a single streamlined system.

Featuring a 360° vertical solar architecture, the Ultra Series captures sunlight from every direction, enabling consistent energy collection across changing conditions, seasons, and sun angles.



Integrated LED + Battery

Seamless pairing with Freedom Classic Luminaire



360° Solar Engine

Optimized for low-light environments



Energy Core to Solar Energy

MPPT-managed charging system

15200 lm

MAX
FLUX

360°

SOLAR
CAPTURE

2060 Wh

MAX
BATTERY

160 mph

WIND
RATED



Mono360 Ultra™

Vertical 360° Solar Engine +
Freedom Classic Luminaire

Why Vertical 360°

Conventional flat panels capture sunlight from one direction and need careful tilt and orientation. The Mono360 Ultra'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 Classic 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 engine captures sunlight from every direction, even in low light.

STEP 2 · MANAGE

Freedom Classic 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 Ultra 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 Classic provides PIR-activated adaptive dimming.
- **Minimal Visual Footprint:** A slim, modern solar column with a matching luminaire, unified, simple, and architectural.

Specifications

MECHANICAL	ULTRA 500W20-472	ULTRA +
PV Module Power	500 W	1000 W
Battery Capacity	1229 Wh	2460 Wh
Net Weight	83.78 lbs	110–145 lbs
Dimensions (in.)	74 × 19 × 13	74. × 19 × 26
MOUNTING		
Tenon OD	Fits Stadard 2 5/8"	
Wind Load Rate	160 mph	
Installation Height	20–44 ft	
installation Distance	Up to 215 ft	

LIGHTING	Freedom Classic Luminaire	RS30	RS40	RS50	RS60	RS80
Light Output		30 W	40 W	50 W	60 W	80 W
Luminous Flux		5700 lm	7600 lm	9500 lm	11400 lm	15200 lm
Color Temperature		– 3000/4000/5000 K –				
Motion Sensor		– PIR / DISS –				
Net Weight		7.1 lbs	7.1 lbs	7.1 lbs	8.8 lbs	8.8 lbs
Dimensions (in)		25.6 × 7.1 × 3.8				

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

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