Marine-Grade, Dual-Powered (Solar + AC) LED Street & Area Light with APP controll, PIR Sensor and High Lumen Output

Product code: AAL-02

Experience a new standard in outdoor illumination with the AAL-02 “Navigator” Solar Area Light, featuring two-way working modes—power it via a high-efficiency solar panel with integrated battery storage or connect it to an external AC supply for continuous operation. Built for reliability and versatile performance, the AAL-02 seamlessly combines cutting-edge LED technology, a robust lithium-ion battery, and a rugged, marine-grade aluminum housing to deliver bright, consistent light in virtually any environment.

Key Features • Two Power Modes – Effortlessly switch between solar-powered battery mode or external AC supply based on your application and energy needs. • High-Performance Solar Panel – The monocrystalline panel (16.2V / 30W) ensures consistent energy capture, maximizing power output even in overcast conditions. • High Lumen Output – Equipped with OSRAM 3030 LEDs delivering up to 5000 lm and an impressive 230 lm/W efficiency for bright, clear illumination. • Dark Sky Compliance – Downward-focused optics minimize glare and reduce light pollution, keeping skies clearer while providing ample visibility.

Smart Light Modes • Manual Color Temperature Setting – Choose between warmer light (3000K) for better visibility in fog or rain and cooler light (5700K) for enhanced brightness in clear weather. • PIR Motion Sensor & Dimming – A wide-angle, 120° motion sensor detects movement up to 8 meters. Illumination ramps up to full brightness when motion is detected and dims to a power-saving mode otherwise—helping conserve energy without sacrificing security. • Integrated FAS Technology – The Fault Alarm System continuously monitors the solar panel, battery, LED array, and PCBA board, providing instant alerts for quick and easy maintenance. • Advanced Battery Management – An intelligent system regulates and optimizes battery usage, extending the battery’s lifespan and ensuring stable performance even in prolonged cloudy or rainy spells.

Marine-Grade, Dual-Powered (Solar + AC) LED Street & Area Light with APP controll, PIR Sensor and High Lumen Output

Product code: AAL-02

Ultra Durable Construction • Marine-Grade Corrosion Resistance (C4H Coating) – The die-cast aluminum body features a specialized protective coating that withstands high humidity, salt spray, and heavy precipitation without fading or rusting. • All-Weather Protection (IP66) – The IP66 rating safeguards internal components from dust and water ingress, delivering reliable operation under extreme weather conditions—from torrential rain to desert sandstorms. • Impact Resistance (IK10) – Engineered to endure shocks and impacts, the AAL-02 is ideal for environments where durability is essential—such as public spaces, parking lots, and busy roadways. • Rugged Mounting Hardware – Durable brackets and stainless-steel fasteners withstand both mechanical stress and vibration, making installation secure and long-lasting. • High-Capacity Li-ion Battery – With a 20Ah (14.8V / 296Wh) capacity, the AAL-02 provides up to 10 days of backup in adverse conditions, ensuring consistent illumination whenever you need it. • Thermal Stability & Heat Dissipation – The robust aluminum housing promotes effective heat dissipation, preserving LED performance and extending component life.

Why Choose the AAL-02 “Navigator”? • Eco-Friendly Operation – Harness solar energy to reduce electricity costs and lower your carbon footprint. • User-Controlled Color Temperature – Manually set the warmth or coolness of the light to suit varying weather conditions or personal preference. • Built to Last – Premium materials, advanced coatings, and integrated fault detection ensure longevity and minimal maintenance. • Versatile & Easy to Install – Two-way power modes offer flexibility for diverse applications—mount to poles, walls, or other structures with minimal effort. • Energy-Saving PIR Sensor – Automatically dims or brightens based on motion detection, reducing wasted energy without compromising security.

Technical data: • Size and weight: 465x532x459mm, 9kg (12kg with bracket) • Battery: 20Ah/14.8V/296Wh Power Lithium Battery, Lifespan >2000 cycles • Solar panel: Monocrystalline >21%, 16.2V/30W • Default Lighting Mode: 100% 3000K/5h + 20% 3000K PIR until dawn • Installation: max height: 6m, max line distance: 24m • Lighting Area: 150m² Note: Set includes solar light and bracket, pole is not included. The times given for charging via the solar panel refer to ideal sunlight conditions, typical for our geographic latitude. Any deviation from the optimal angle of the sun’s rays, as well as partial shading, can drastically reduce the panel’s efficiency—resulting in extended charging times.