

# MS2000-HKDC

## Mobile Hybrid Power Lighting Tower

Energy Storage Battery / Diesel Generator

### Product Introduction

MS2000-HKDC is high-efficiency mobile hybrid-powered lighting tower, integrating energy storage batteries and diesel generator, specifically designed to meet continuous illumination demands in extreme environments. Equipped with 10.2kWh energy storage battery, 3kW DC generator, for noise-sensitive scenarios like nighttime. Equipped with a PLC intelligent control system, support three operation modes: battery-powered mode, generator-powered mode, and hybrid-powered mode. These modes can automatically switch based on predefined logic or be manually selected to optimize energy management. It supports three operation modes (manual, automatic, and timed) with light-sensing auto-switching and multi-stage brightness adjustment.



#### Hybrid power supply

Diesel power generation and large-capacity batteries, improve energy utilization efficiency and can connect PV equipment to provide continuous and stable power support for lighting.



#### Intelligent control

PLC controller is combined with the photosensitive sensor, and the device can automatically adapt to the change of light, and the bright can be adjusted.



#### Strong adaptability

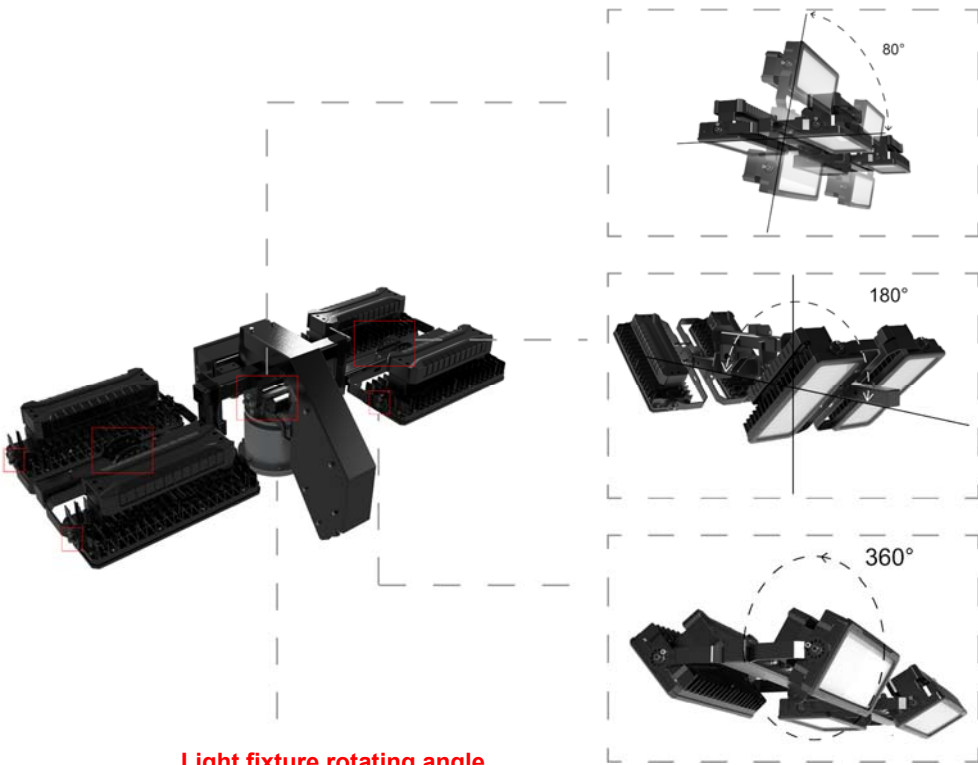
Whether it is outdoor projects, emergency lighting, or event sites, the hybrid power lighting tower can cope with complex environments with strong endurance and flexible lighting control.



#### Easy to maintain

Remote monitoring and diagnosis functions reduce the need and cost of on-site care.

# Lamp Angle Adjustment



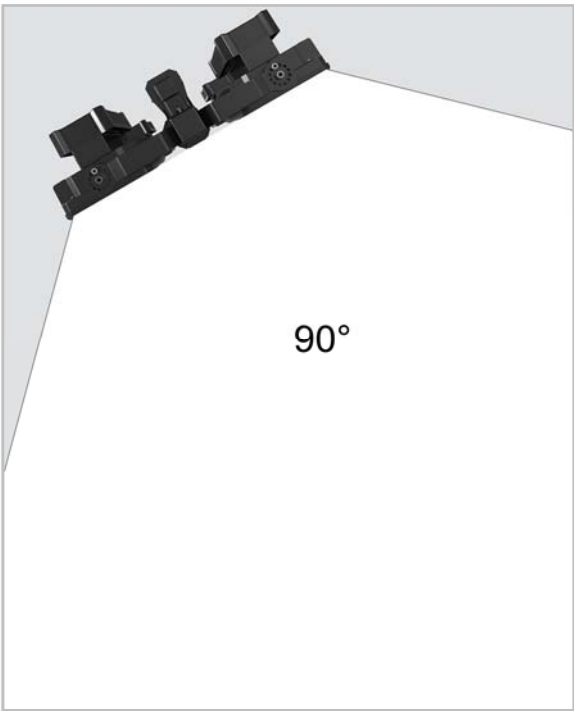
**Light fixture rotating angle**  
The total light fixture can rotate, range 0°~359°

**Light fixture tilting angle**  
The total light fixture can be adjusted the tilting angle, range 0°~80°

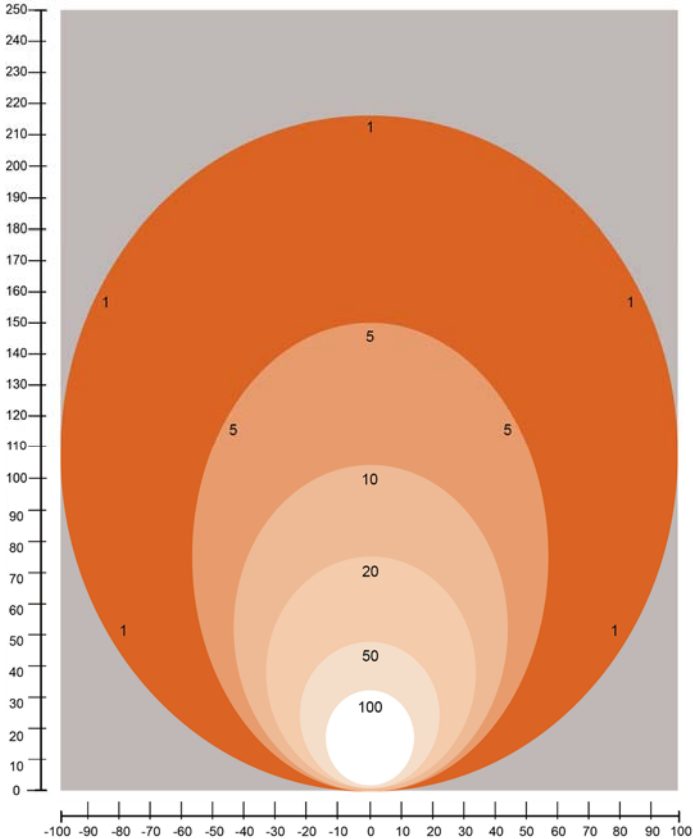
**Lamp front and rear angle**  
Each lamp can rotate front and back, range 0°~180°

**Lamp rotation angle**  
Each lamp can rotate independently 360° to meet any lighting angle

## LED Beam Angle: 90°



## Lighting Range: Effective lighting area 8000m<sup>2</sup>@5 lm



Unit: m

# Technical Parameter

## Main Parameter

Model	MS2000-HKDC
Light type	LED
Total lighting wattage	4x320W
Luminous flux (Max)	192000 lm
Light intensity	201600 cd
Effective lighting area	8000m <sup>2</sup> @5 lm
Rated voltage	DC 48V
Mast extended height	9m
Light fixture tilting angle	80°
Light fixture rotating angle	359°
Diesel genset rated power	3kWe
Fuel tank capacity	90L
Hydraulic oil tank capacity	5L
Max. towing speed	80km/h
Max. wind speed	100km/h
Fully extended/retracted time	12/15 s
Noise level @7m (genset power)	58dB(A)
Noise level @7m (battery power)	50dB(A)
Wet weight	1409kg
Dry weight	1319kg
Dimensions (Fully retracted)	2399x1448x2468mm
Dimensions (Fully extended)	2399x2562x9000mm
Transportation dimensions	1595x1448x2468mm
40°Loading (qty)	8

## Energy Storage Battery

Battery type	LFP
Cell capacity	200Ah
Rated power	10.2kWh
Rated voltage	51.2V
Operating temp. range	Charge: 0~60°C Discharge: -20~55°C
Communication method	RS485 / CAN

## DC Charging Interface

Rated voltage	DC 600V
Rated current	175A



## Fuel Consumption

Load Status	2xLamps	4xLamps
Fuel Consumption(L/h)	0.36	0.62

## Parts Parameters

### Engine

Engine brand	KUBOTA
Engine model	Z482-E4B-ACP-1
Rated power	4.6kWm
Number of cylinders	2
Displacement	0.479L
Type of fuel	No.2-D S500 or S15
Type of oil	API-CH
Oil capacity	2.5L

### LED Light

Number	4
Power	320W
Total power	1280W

## Standard Configuration

- KUBOTA Engine
- 4x320W LED Light
- MPPT Module
- 9m Mast
- Steel Structure Chassis
- Axle Vibration Damping
- DC Alternator
- 10.2kWh Energy Storage Battery
- PLC Controller
- Hydraulic Power Unit
- Extended Outriggers
- DC Charging Interface
- 50°C Radiator
- DC/DC Module
- Fuel Tank
- Hydraulic Explosion-proof Valve
- Trailer And Driven Brakes
- Emergency Stop Button

## Application Scenarios

