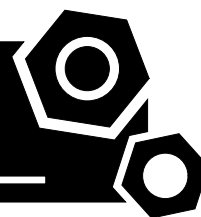


**Mobile light tower**

**FS2000-KDC**

# SPECIFICATIONS



**Mobile Light Tower  
FS2000-KDC, Tier 4F**



**1 Standards & Conditions**

**Design Standards**

The designs and the productions are in conformity with:

- GB T 1883.1-2005
- JB8891-1999
- GB252-2011
- GB20891-2014
- GB4208-2008
- AS3000: 2018
- AS3010: 2017

**Design Conditions**

- Installation place: outdoors.
- Ambient temperature: -15℃ to 50℃.The coolant heater is needed when the temperature is below 0℃
- Humidity: Less than 90%.
- Altitude: Less than one thousand (1000) meters above sea Level.

**Painting Process**

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

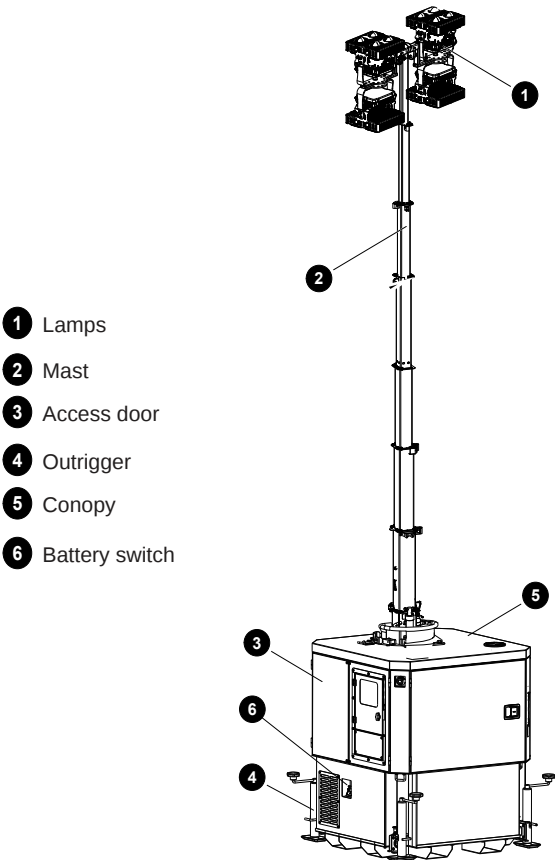
**2 General Features**

- Kubota engine Z482-E4B-GB
- DC/VF alternator PMG-DC-18-3
- Microprocessor control module PLC-805
- Governor type : Electronic control
- Eight masts with hydraulic extension and manual rotation
- Hydraulic power unit
- Hydraulic cylinder with explosion-proof valve
- 4x500W metal LED lamps
- 1x12V/70AH sealed for life maintenance free battery(supply for engine)
- Emergency stop switch
- Lockable battery isolator switch
- Powder coated canopy
- Vibration isolators between the engine/alternator and base frame
- Dry type air cleaner
- Fuel tank( 260 running hours under full load)
- Easy maintenance
- Operation Manual / Specifications

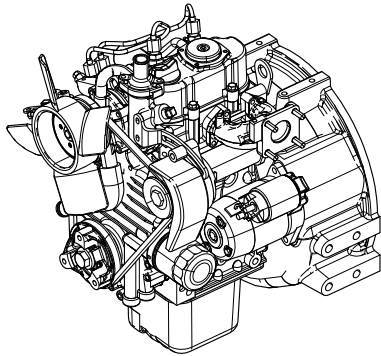
**3 Equipment Specification**

|                                               |                  |
|-----------------------------------------------|------------------|
| Model.....                                    | FS2000-KDC       |
| Light type.....                               | LED              |
| Luminous flux(Max)lm.....                     | 216000           |
| Light intensity(Max)cd.....                   | 231500           |
| Tank capacity.....                            | 200L             |
| Wet weigh .....                               | 1100 kg          |
| Dry weigh .....                               | 1000 kg          |
| Total lighting wattage .....                  | 4x500W           |
| Dimensions (Fully retracted).....             | 1167*1133*2390mm |
| Dimensions (Fully extended).....              | 1756*1722*8200mm |
| Tilting Angle of Light Fixture rotation ..... | 90°              |
| Sound pressure level @7m .....                | 53dB(A)          |
| Fully extended/retracted time .....           | 11/13s           |
| Hydraulic oil type .....                      | L-HM46           |
| Hydraulic oil tank capacity .....             | 5L               |
| Rated load output .....                       | 3.0kW            |
| Voltage/Ampere .....                          | DC 48V/62.5A     |

| Light Tower Fuel Consumption |         |         |
|------------------------------|---------|---------|
| Number of running lamp       | 2xLamps | 4xLamps |
| Fuel Consumption(L/h)        | 0.48    | 0.76    |

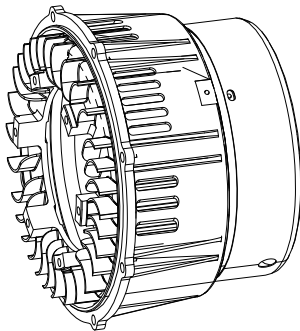


Engine



|                                |                         |
|--------------------------------|-------------------------|
| Engine Manufacturer/Brand..... | KUBOTA                  |
| Engine Model.....              | Z482-E4B-GB             |
| Dimensions L×W×H.....          | 487.9×412×564.2mm       |
| Dry Weigh (approx.) .....      | 80Kg                    |
| Number of Cylinders.....       | 2                       |
| Bore .....                     | 67mm                    |
| Stroke .....                   | 68mm                    |
| Displacement.....              | 0.479L                  |
| Compression Ratio .....        | 23.5                    |
| Type of Injection.....         | Spherical Type (E-TVCS) |
| Intake System.....             | Natural aspirated       |
| Intake Resistance .....        | ≤2.45kPa                |
| Cooling System .....           | Water cooled            |
| Fan .....                      | Pusher                  |
| Battery Voltage .....          | 12V                     |
| Type of Fuel.....              | No.2-D (ASTMD975)       |
| Type of Oil .....              | API -CH                 |
| Oil Capacity .....             | 2.5L                    |
| Type of Coolant .....          | Glycol mixture          |
| Back Pressure.....             | 9.33kPa                 |
| Speed .....                    | 1800rpm                 |
| Prime Power .....              | 4.6kW                   |

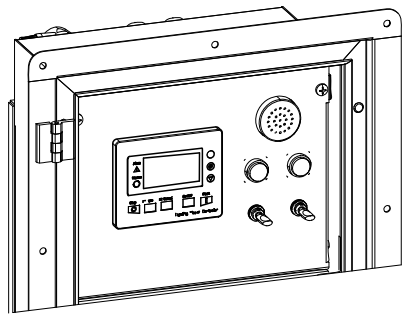
Alternator



|                                     |           |
|-------------------------------------|-----------|
| Alternator Manufacturer/Brand ..... | POWERLINK |
|-------------------------------------|-----------|

|                          |             |
|--------------------------|-------------|
| Alternator Model .....   | PMG-DC-18-3 |
| Stator Pole Number ..... | 30          |
| Speed .....              | 1800rpm     |
| Voltage(DC) .....        | 48V         |
| Altitude.....            | ≤1000m      |

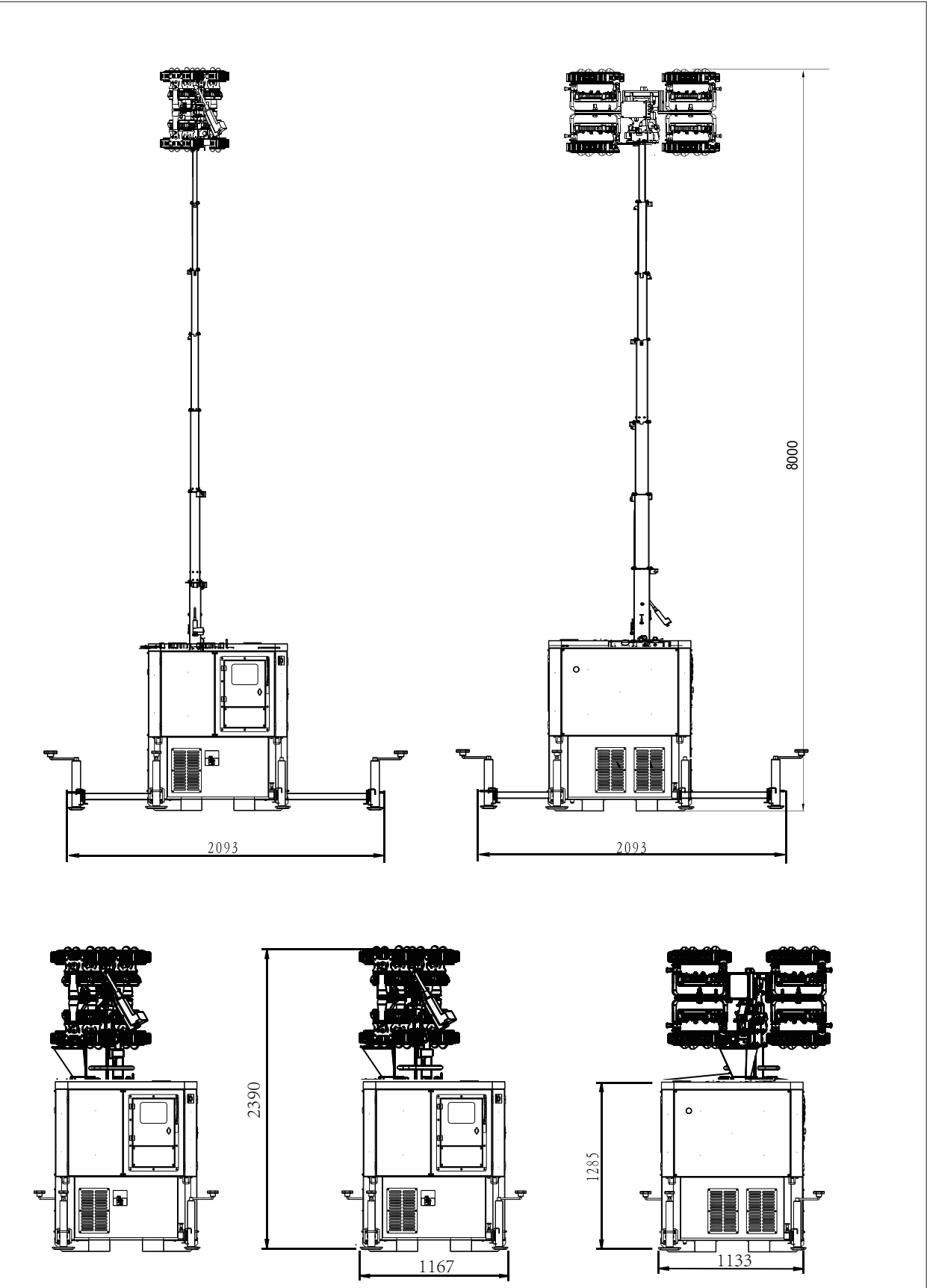
PLC-805 Control System



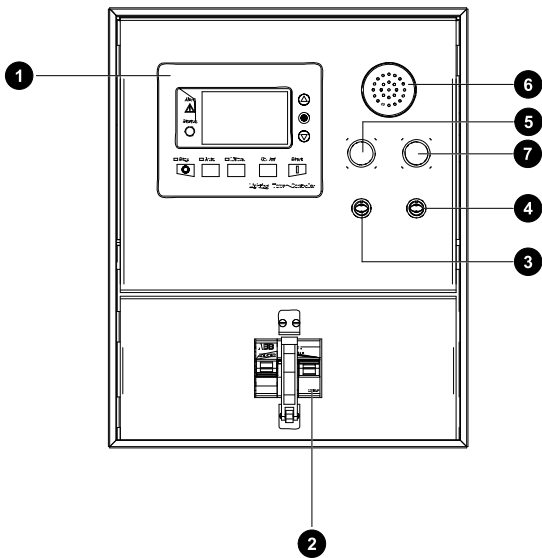
PLC-805 is an advanced control module based on microprocessor, apply to AC/DC light tower.The controller is equipped with a powerful graphic display showing icons, symbols and bar graphs for intuitive operation. Accurately measure various operational parameters and display all values and alarms information on the LCD.

- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of light tower
- Indicating operation status, fault conditions, all parameters and alarms
- Manual, automatic and remote work mode selectable
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Overall power output display
- Real time clock for time and date display, overall runtime display, 99 log entries
- Communication with PC via RS485 interface, using MODBUS protocol

5 Overall Dimension

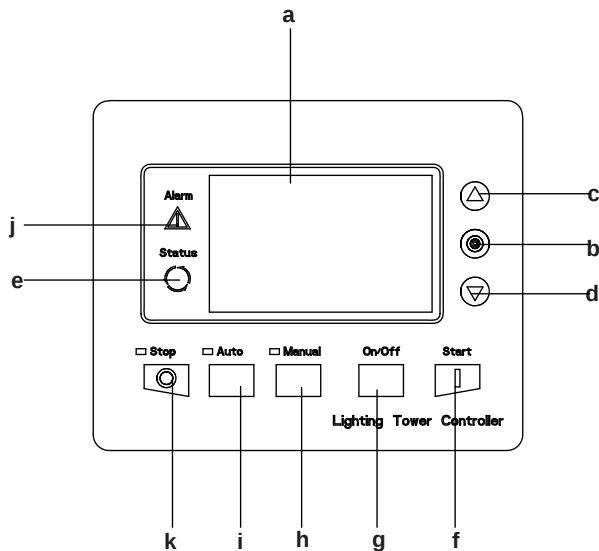


6 Control System



| Ref. | Description                      |
|------|----------------------------------|
| 1    | Control module                   |
| 2    | Main circuit breaker             |
| 3    | Mast up/down switch              |
| 4    | Lamp tilting switch              |
| 5    | Balance indicator of light tower |
| 6    | Alertor                          |
| 7    | Confirm switch                   |

Control cabinet



| Ref. | Description                                                         |
|------|---------------------------------------------------------------------|
| a    | Main status display                                                 |
| b    | Cyclic selection of the display mode (MEASUREMENT->ADJUSTEMENT)     |
| c    | Select the set point, select the screen or increase set point value |
| d    | Select the set point, select the screen or decrease set point value |
| e    | Status Indicator                                                    |
| f    | Start of the engine in maunal mode                                  |
| g    | Light On/Off                                                        |
| h    | Maunal mode                                                         |
| i    | Auto mode                                                           |
| j    | Alarm indicator                                                     |
| k    | Stop of the engine/Alram reset button                               |

Control module

|                 |
|-----------------|
| 1000029346-B3-E |
| 06.2022         |