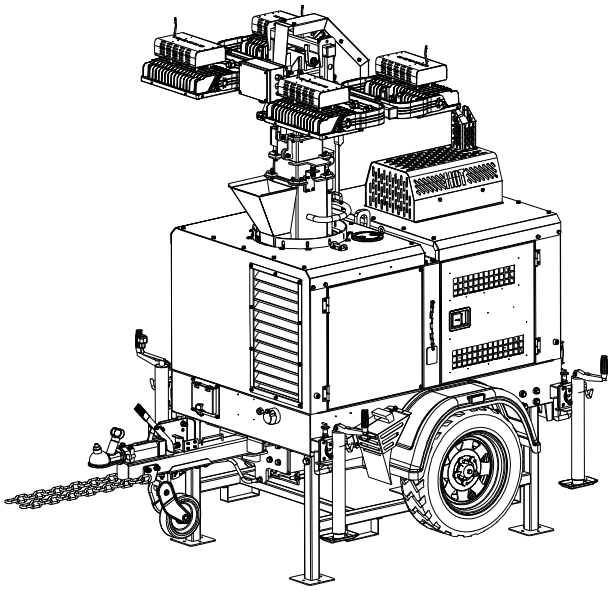
POWERINK
Power Systems



Mobile light tower

MS2000-KDC

SPECIFICATIONS

www.powerlinkenergy.com

Mobile Light Tower
MS2000-KDC

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
- VSB 1 Rev 4 June 1999
- 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.

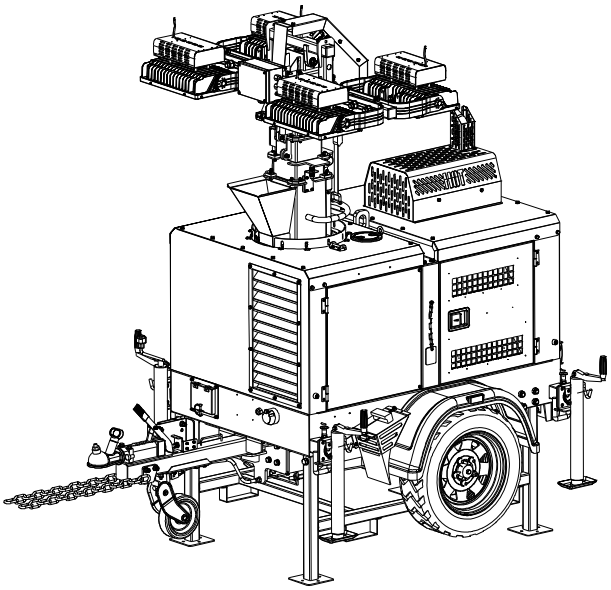
2 General Features

- Kubota engine Z482-E4B
- DC/VF alternator PMG-DC-18-3
- Microprocessor control module PLC-805
- Governor type：Electronic control
- Nine masts with hydraulic extension and manual rotation
- Hydraulic power unit
- Hydraulic cylinder with explosion-proof valve
- 4x500W LED lamps
- 1x12V/80AH sealed for life maintenance free battery(supply for engine)
- Emergency stop switch
- DC input socket for charging battery
- Lockable battery isolator switch
- Powder coated canopy
- Vibration isolators between the engine/alternator and base frame
- Axle of leaf spring type
- Dry type air cleaner
- Fuel tank(132 running hours under full load)
- Fuel drain outlet
- Operation Manual / Specification

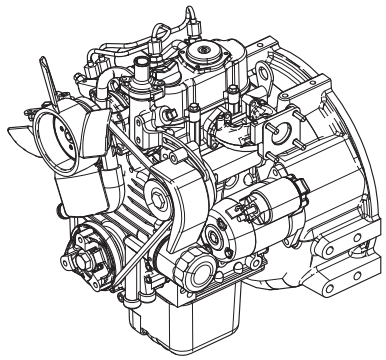
3 Equipment Specification

Model..... MS2000-KDC
Light type..... LED
Luminous flux(Max)lm.....300000
Tank capacity..... 90L
Wet weigh 1293kg
Dry weigh 1233kg
Total lighting wattage..... 4x500W
Tire size.....175/70R14LT 6PR*2
Dimensions (Fully retracted)..... 2414x1448x2489mm
Dimensions (Fully extended)..... 2906x2100x9000mm
Tilting Angle of Light Fixture rotation..... 90°
Maximun towing speed..... 80km/h
Maximun wind speed rating.....102km/h
Sound pressure level @7m..... 53dB(A)
Fully extended/retracted time 12/15s
Hydraulic oil type L-HM46
Hydraulic oil tank capacity.....5L
Voltage..... DC 48V

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

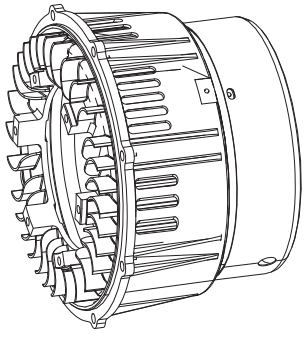


Engine



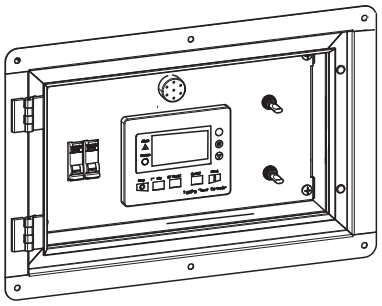
EngineManufacturer/Brand.....KUBOTA
Engine Model..... Z482-E4B
Dimensions L×W×H..... 487.9×412×564.2mm
Dry Weigh (approx.) 80kg
Number of Cylinders..... 2
Bore..... 67mm
Stroke 68mm
Displacement..... 0.479L
Compression Ratio 23.5
Type of Injection..... Spherical Type (E-TVCS)
Intake System..... Natural 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

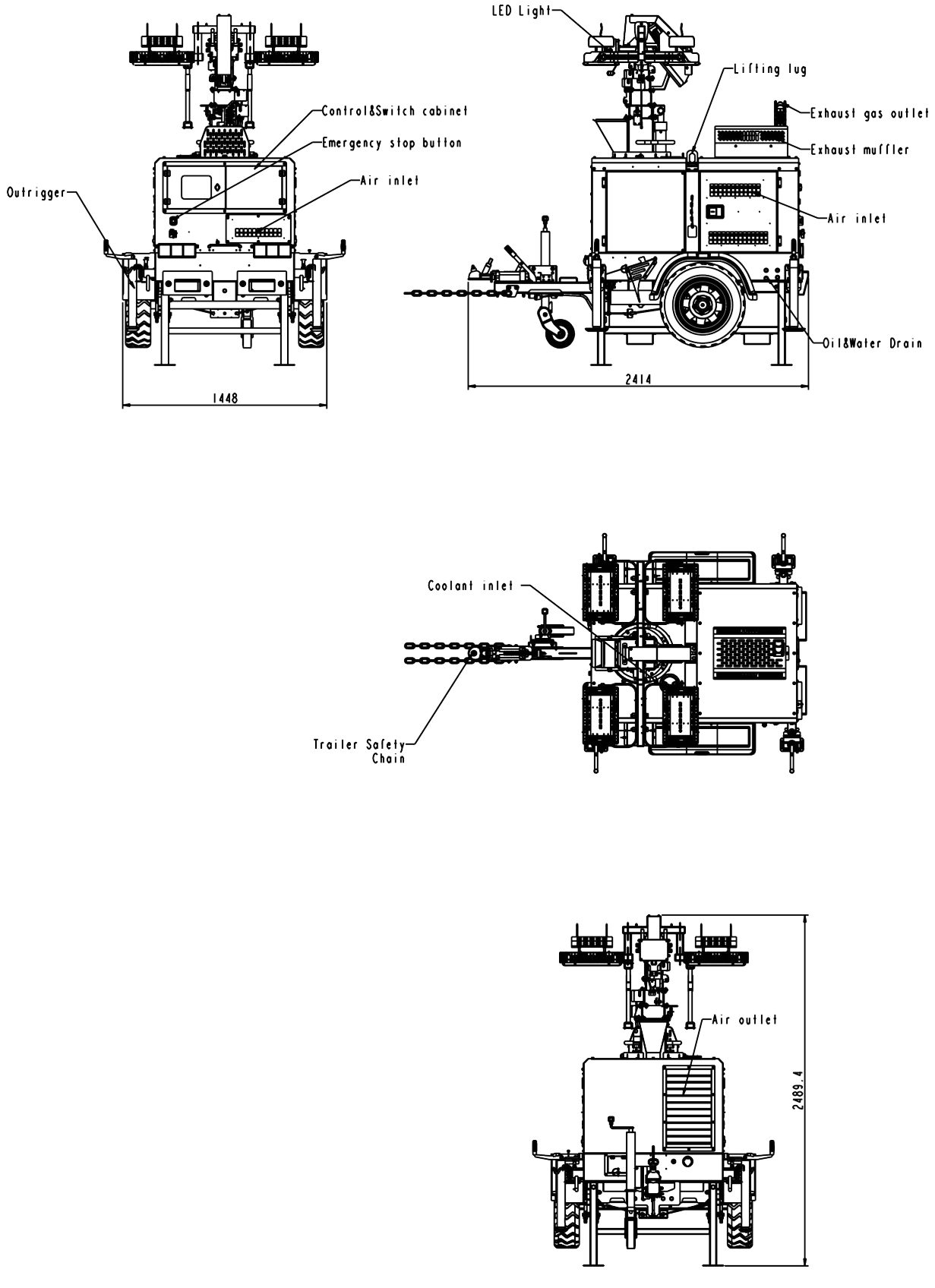
PLC-805 Control System



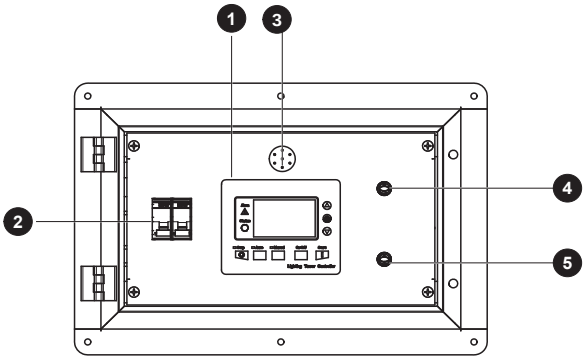
PLC-805 is an advanced control module based on microprocessor, apply to AC/DC light tower.The controller is equipped with a powerful graphic display showing icons, symbols and bar graphs for intuitive operation. Accurately measure various operational parameters and display all values and alarms information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

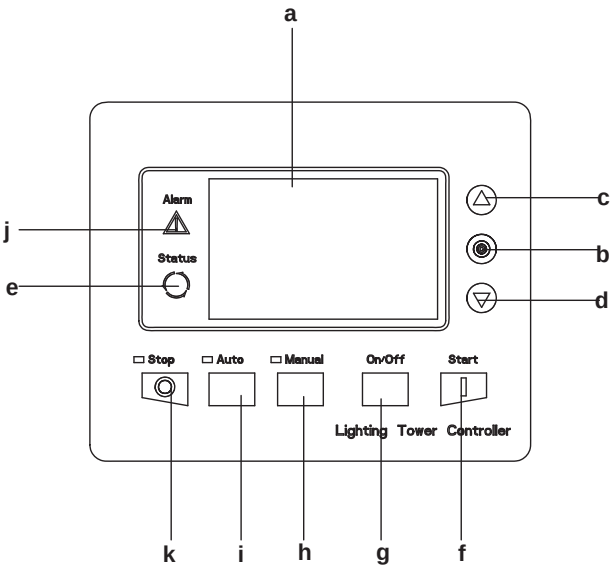


6 Control System



Ref.	Description
1	Control module
2	Main circuit breaker
3	Buzzer
4	Mast up/down switch
5	Lamp tilting 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

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