

Mobile Light Tower

GMS2000

SPECIFICATIONS



Mobile Light Tower GMS2000

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°C to 50°C. The coolant heater is needed when the temperature is below 0°C
- 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.

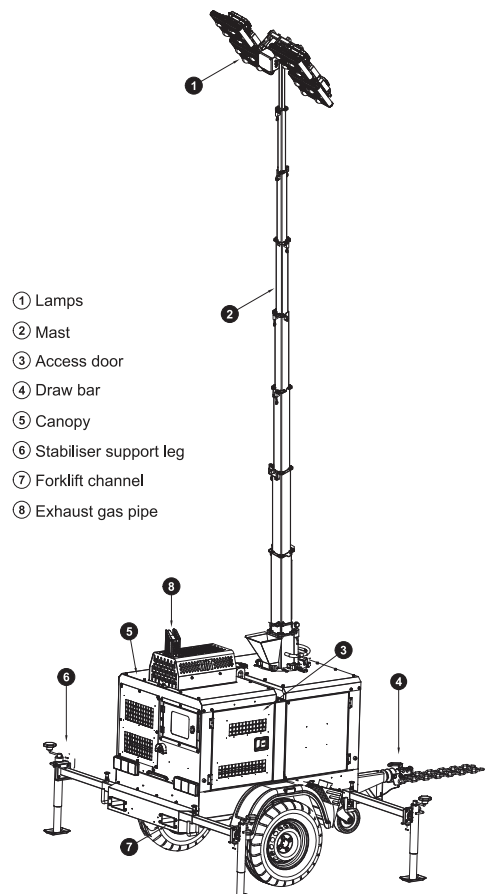
2 General Features

- Kubota engine Z482-E4B-ACP-1
- DC/VF alternator PMG-DC-18-3
- Microprocessor control module PLC-805
- Governor type : Electronic control
- Nine masts with manual rotation 359°
- 4x500W metal LED lamps
- 1x12V/70AH 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
- Dry type air cleaner
- Fuel tank(118 running hours under full load)
- Fuel drain outlet
- Easy maintenance (easy to replace the current rectifier etc.)
- Operation Manual / Specifications

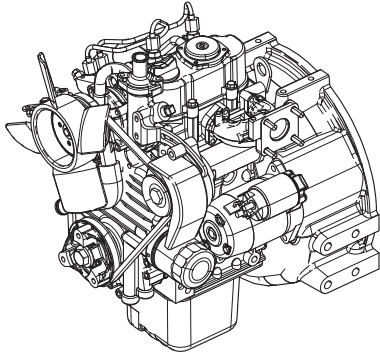
3 Equipment Specification

Model.....	GMS2000
Light type.....	LED
Luminous flux(Max)lm.....	202600
Light intensity(Max)cd.....	213125
Tank capacity.....	90L
Wet weigh	980kg
Dry weigh890kg
Total lighting wattage.....	4x500W
Tire size	175/R13 LT *2
Dimensions (Fully retracted).....	2400x1450x2280mm
Dimensions (Fully extended).....	2400x2562x9000mm
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
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

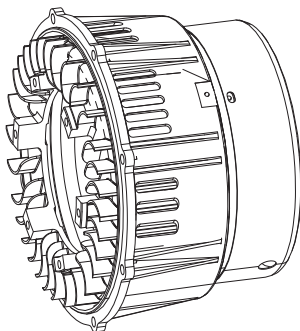


Engine



Engine Manufacturer/Brand.....	KUBOTA
Engine Model.....	Z482-E4B-ACP-1
Dimensions LxWxH.....	487.9x412x564.2mm
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

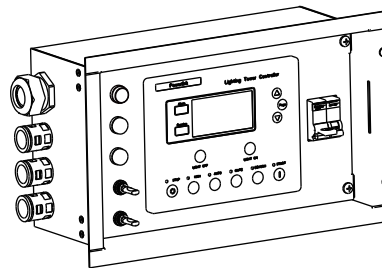
Alternator



Alternator Manufacturer/Brand.....	OEM
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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.

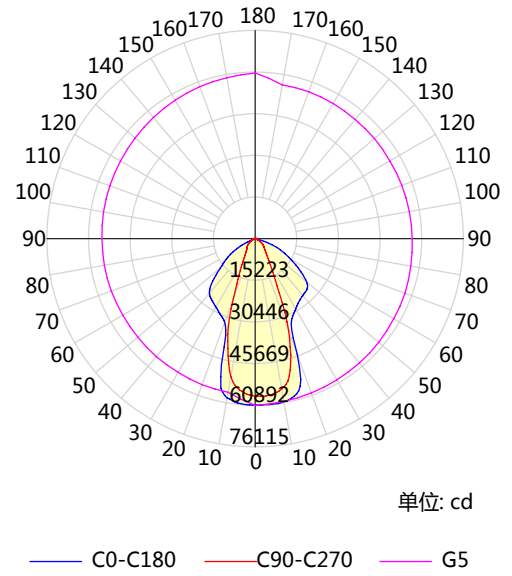
- Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of light tower
- Indicating operation status, fault conditions, all parameters and alarms
- Manual, automatic and remote work mode selectable
- Multiple protections; multiple parameters display, 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

4 Luminaire

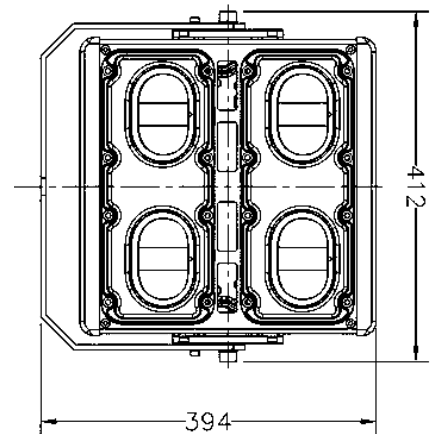
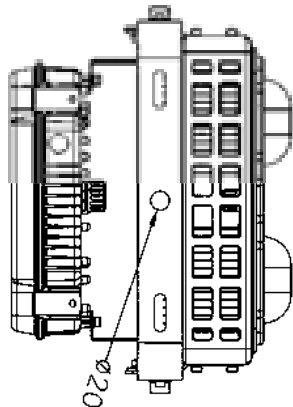
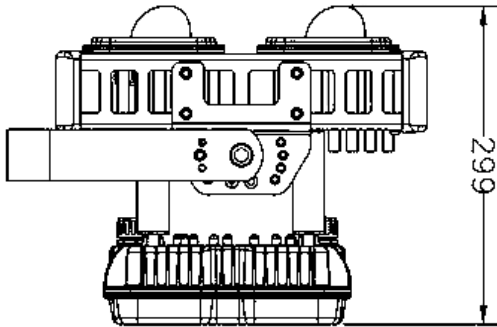
Luminaire Data:

Item	Description
Rated power	500W
Rated luminous flux	54661.8 lm
Luminaire efficiency	100%
Upper luminous flux ratio	1%
Center light intensity	60740.43 cd
Peak light intensity position	H0 V5
Luminous flux of lamps and lanterns	54661.8 lm
Lower luminous flux ratio	99%
Lamp luminous efficiency rating	110.59
Peak light intensity	60892.13 cd

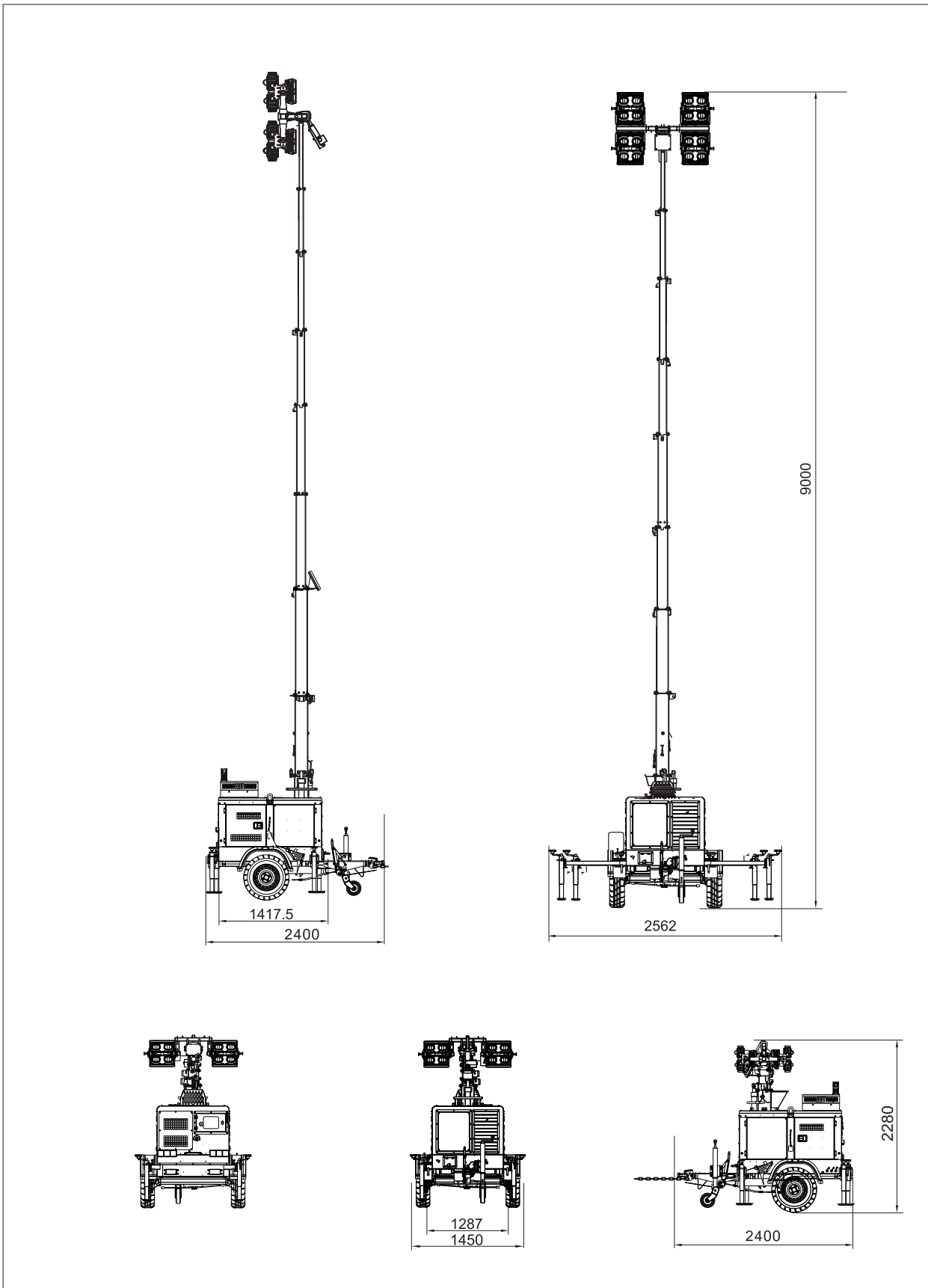
Luminous emittance 1:



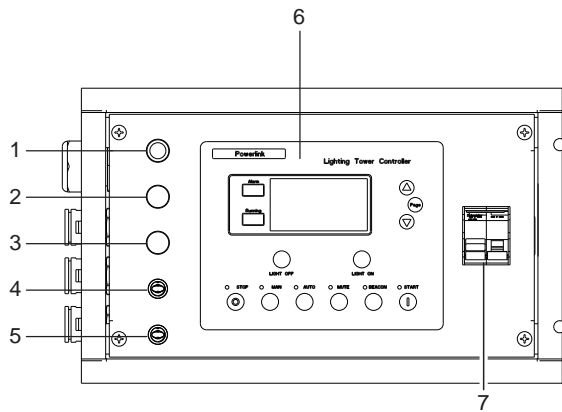
Out-line:



5 Overall Dimension

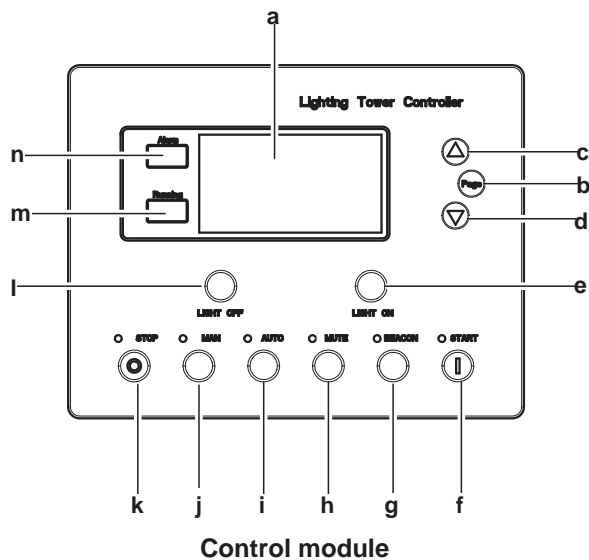


6 Control System



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

Switch 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	Turn on a light each press in manual mode
f	Start of the engine in maunal mode
g	Open/colse button of Annunciator
h	Deactivates the horn
i	Auto mode
j	Maunal mode
k	Stop of the engine/Alram reset button
l	Turn off a light each press in manual mode
m	Running indicator
n	Alarm indicator