

**MLTY87**

**YANGDONG Powered Mobile Light Tower**



# LIGHT TOWER

Lighting Your World

## QUIET LIGHT

Powerful LED light with a quiet operation.

## BUILT TOUGH

Built to the highest standards.

## SUPER SAFE

Designed with the latest safety innovations.

## ROBOTIC ROTATING



Construction  
& Civil



Minning &  
Quarries



Rental



Industrial



Agriculture



## GENERATING SET

Output Ratings	<b>PRIME</b>	<b>STAND BY</b>
400/230V-3 Phase, 50Hz/1500 rpm (kW)	79	87
Engine Make	YANGDONG	
Engine Model	YD4EZLD-Elec	
Governing Type	Electronic	
No of Cylinders & Arrangement	4L	
Bore and Stroke (mm)		
Displacement (Cubic Capacity in Liters)	4,4	
Injection System	Direct Injection	
Aspiration System	Natural	
Rotation	Counter Clockwise	
Cooling System	Water Cooled	
Speed (rpm)	1500	
Fuel Consumption @ 50% Load (L/h)	8,7	
@ 75% Load (L/h)	13,05	
@ 100% Load (L/h)	17,4	
Total Coolant Capacity Including Radiator (L)	13	
Exhaust Gas Temperature (C°)	450 - 500°	
Radiator Cooling Air Flow / min (m3/min)	89	
Combustion Air Flow (m3/min)	79	
Exhaust Gas Flow (m3/min)	13,3	
Fuel Tank Capacity ( Open Type / Canopied) (L)	208,8	
Alternator Make	MECCALTE / NSM	
Power Factor	0,8	
Number of Bearings	Single Bearing	
Insulation Class	H	
Total Harmonic Content	2%	
Ingress Protection	IP23	
Connection Type	Star	
Excitation System	Self Excitation	

## LIGHT TOWER DATA

Lights Power Total (W)	400W - 3000W
Lights Lumens	Up to 300.000 Lumen
Mast Operation Type	Fully Hydraulic (F)
	Hydro-Mechanical (H)
	Manuel Handle Type (M)
Mast Height	7 or 9 Meters
Number of Mast Sections	6 or 8 Sections
Mast Rotation Degree	359°
Light Tilt Types	Robotic Head Electric ( R)
	Manuel Mechanic (M)
Trailer Suspension System	Rubber Torsion axle
Trailer Attachment	Ball
Tire Rim Size	R14
Acoustic Pressure	65 db(A) @ 7m
Container Load Capacity	8 Units
Socket Box	2 x 230V Schuko 1 X 400V Schuko
Breaking System	Inertia drum braking with stable towing height, parking brake
Wind Speed Rating	100 km/hr
OPTIONAL	
Tower Raise Mechanism	Manuel or Hydromechanical
Controller	D500 or DSEL401MKII 6210
Lights Type	LED or Metal Halide
No.of Axle	Two Axles

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This light tower is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and higher altitudes. De-ration may apply, please consult your dealer for specific site ratings. Some of the specifications are not standard on all light tower models.

## STANDARD SPECIFICATIONS



### Powerful Illumination

The MASTERPOWER LIGHT TOWERS's 9-meter mast design allows light to be projected to where it is needed, 359-degree mast rotation with lightbar tilt capability as standard. The Perkins-powered 48 Volt DC MASTERPOWER LIGHT TOWERS delivers 200,000 lumens to the working environment through 4 powerful 500 watt leading edge technology LED lamps.



### Strong Body

Built to be rugged and hard wearing, the MASTERPOWER LIGHT TOWERS's powder coated full steel body with galvanised Hydraulic mast assembly are integrated with High Quality 1,360mm wide maintenance free torsion axle suspension. Four independently adjustable outriggers give the MASTERPOWER LIGHT TOWERS solid grounding to reach the heights of its performance with simplicity and stability.



### Integrated Safety

The MASTERPOWER LIGHT TOWERS design incorporates, as standard inclusions, market leading safety innovations intended to support the care of both physical and human assets. The MASTERPOWER LIGHT TOWERS will, through audible voice alarm, warn the operator if the handbrake is not engaged or the MASTERPOWER LIGHT TOWERS is not level. When either or both conditions are not met, the mast cannot be raised, or if the mast is raised – will automatically lower. Simple and integrated ideas helping to prevent incorrect deployment of the MASTERPOWER LIGHT TOWERS.



### Smart Controls

The MASTERPOWER LIGHT TOWERS is integrated with purpose built DATAKOM D500 OR DSE lighting tower controller that offers effortless operation, auto start stop capability, engine protection with future facing expandability. The optional expansion CLOUD Based NextG Module provides integration and potential of remote equipment monitoring.



### Robotic Head Lights (Optional)

Masterpower fully hydraulic mast light towers use a robotic head that provides great convenience to the user. With the control buttons on the control panel, it is possible to change the direction of the lights on the tower, either right or left, or up and down, without lowering the tower. This system, which provides great convenience to the user, both saves time and provides security.



### Harsh Climatic Conditions (Optional)

Masterpower light towers are equipped with a diesel fuel heater (Webasto type) that can preheat inside the canopy according to the customer's request (Optional) . It provides convenience to the user by providing heating in the cabin in very cold climates and increasing the sensitive devices such as engine, fuel tank, control module to the working ambient temperature.

## RATING DEFINITIONS

### PRIME POWER

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

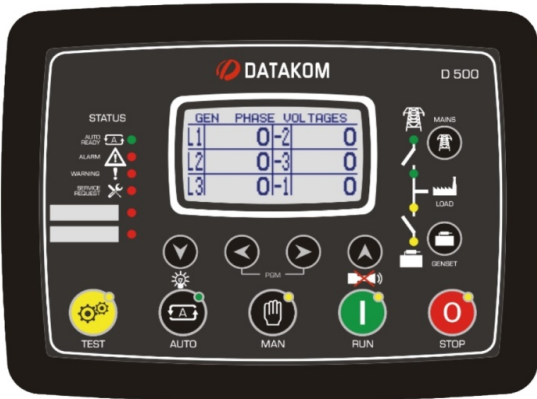
### STANDBY POWER

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

## Advanced Light Tower Controllers

The light tower control Unit is an Auto Start Control Module for single light tower applications. It includes a backlit LCD display which clearly shows the status of the engine all the times. This module can either be pro-grammed using the front panel or by using the AMF configuration suite PC software.

### D500 - MK2 DATAKOM



### DSE 6620 DEEPEA



### Metering & Alarm Indicators

- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown) - Optional
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage / frequency
- Charge fail
- Loss of magnetic pick-up signal - Optional

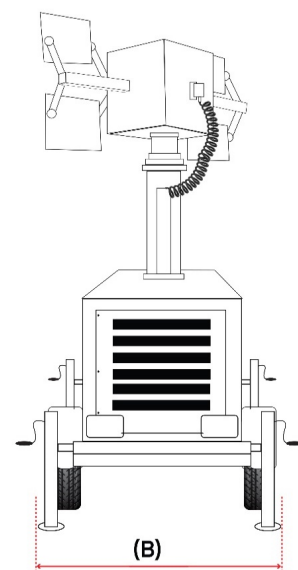
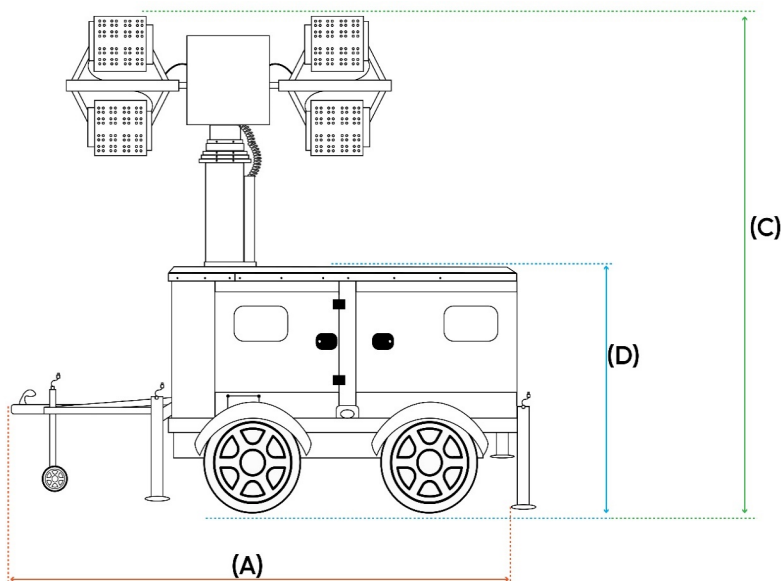
### Communications

- Ethernet , GSM-GPRS
- Internal GPRS modem (optional)
- Embedded web server
- Web monitoring, Web programming
- GSM-SMS
- E-mail
- Modbus RS-485, Modbus TCP/IP
- SNMP
- USB Host (optional)
- USB Device
- RS-485,
- RS-232 (optional)
- Micro SD card slot (optional)
- J1939-CANBUS

Masterpower uses next generation genset control units like Datakom and Deepsea, combining multi-functionality and wide communication possibilities together with a reliable and low cost design. These units comply and mostly exceeds world's tightest safety, EMC, vibration and environmental standards for the industrial category. Software features are complete with easy firmware upgrade process through USB port. The Windows based PC software allows monitoring and programming through USB, RS-485, Ethernet and GPRS. The PC based Scada softwares allows monitoring and control of an unlimited number of gensets from a single central location.

### FUNCTIONALITIES :

AMF unit with uninterrupted transfer  
 ATS unit with uninterrupted transfer  
 Remote start controller  
 Manual start controller  
 Engine controller  
 Remote display & control unit  
 Waveform display of V & I  
 Harmonic analysis of V & I



## Dimintions

Overall Length including drawbar - in (mm)	(A)	3100
Overall Width - in (mm)	(B)	1500
Overall Height travel position - in (mm)	(C)	2200
Overall Height without Tower - in (mm)	(D)	1900
Tower Height - in (m)		7m or 9m
Tire Size		R14
Shipping Weight - No Fuel in (Kg)		1600
Working Weight - With Fuel in (Kg)		1774

## Available Options

We offer a range of optional features and accessories to tailor our light towers to meet your power and light needs.

### OPTIONS

A variety of light tower control panels  
 Additional protection alarms and shutdowns  
 Water fuel separator  
 Water jacket heater  
 Battery charger  
 Circuit Breaker 3 / 4 Poles

### ACCESSORIES

Genuine spare parts  
 Load banks  
 Auxiliary fuel tanks  
 Manual & automatic transfer switches

## Distributed And Serviced By :

### HEAD OFFICE :

MASTERPOWER JENERATOR SAN. VE TIC. A.Ş.  
 Aydıntepe Mah. Alkan Sk. No:7/A TR-34947 Tuzla / İSTANBUL TÜRKİYE  
 Tel : +902164946484 Fax : +902164946485

### FACTORY :

MASTERPOWER JENERATOR SAN. VE TIC. A.Ş. BURSA SERBEST BÖLGE ŞUBESİ  
 Bursa Serbest Bölgesi Ata Mah. Gelincik Cad. No:9 16600 GEMLİK / BURSA TÜRKİYE



"AN INSPIRED DESIGN TO MEET YOUR NEEDS"