

#### **Product Introduction**

GRANDWATT HYBRID series is an advanced lighting tower that operates from diesel and lithium battery combination. Utilizing latest, hybrid technology, it will save 39% fuel cost, extend 57% maintenance period, running time before refill reach to 520h with big fuel tank capacity 348L, which will save labor cost drastically. In the meanwhile, it will reduce CO₂ emissions and noise at night. The HYBRID is ready to apply in road construction, mining, oil field, events and military, provide continuous all-weather and all years round illumination.



Kubota.













# **RUNNING TIME**



**From Battery** 8 hrs/day

# **RUNNING TIME**



# **RUNNING TIME**



### REDUCTION



Co<sub>2</sub> emissions

## REDUCTION



Noise







#### HYBRID LIGHT TOWER

Standard Model		HT10-M2240/DB	
Mast System	Max mast height	9,200mm ( 30' 2")	
	Mast structure treatment	Hot galvanizing	
	Mast raise & telecope	Hydraulic	
	Light bar rotation	Electric 340°	
	Light bar tilt	Electric 90°	
Luminaire	Luminaire	7*320 W LED (48 VDC)	
	Overall lumens	380,800 Lumens	
Dimensions	Overall width	2,070mm ( 6' 9½" )	
	Overall height	2,410mm ( 8')	
	Overall length	4,810mm ( 15'9")	
	Weight	2,000 kg (4,409 lbs)	
Engine & Alternator	Engine model	KUBOTA D1105	
	Engine characters	3 cylinders, 4 cycles & water cooling	
	Alternator	DC type	
Battery	Lithium battery	2*200Ah	
General Data	Fuel tank	348 liters (92 US gal) bunded metal tank	
	Fuel consumption	1.78 L/hrs	
	Hybrid mode consumption	0.67 L/hrs	
	Run time before refuel	455 hours	
	Control system	Hybrid controller	
	Max wind resistance	20km/h (45mph)	
	Max units load in 40' HC	3	

Comparison with Diesel and Hybrid Model					
Model	HT10-M2240 (Diesel only)	HT10-M2240/DB (Diesel& Lithium Battery)	Hybrid Model Advantage (Increase or Decrease Percentage)		
Engine	Kubota Z482	Kubota D1105	/		
Fuel consumption per 14 lighting hours	17.36 liter	10.68 liter	Decrease 38.4%		
Bunded metal fuel tank	348 liters ( 92 US gal)	348 liters ( 92 US gal)	/		
Refueling cycle	280 hrs	520 hrs	Increase 85%		
Silent lighting time per day	N/A	8 hrs	/		
Engine running time per day	14 hrs	6 hrs	Decrease 57%		
Fuel cost calculated as US\$1.21/liter, running 2,000 hours	US\$3,000	US\$1,835	Decrease 39%		
Maintenance cost calculated as running 2,000 hours	US\$565	US\$265	Decrease 53%		
Labor cost calculated as running 2,000 hours, estimated US\$500 per time	US\$5,500	US\$2,500	Decrease 55%		

Remark: Above calculation has been based on working time 14 hours per day, 30 days per month, not including changing engine oil cost and travelling cost.

