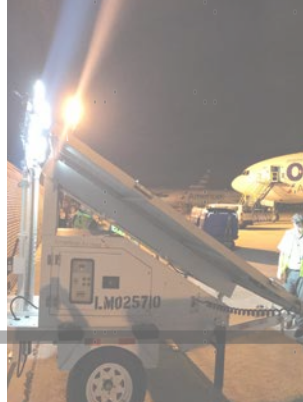
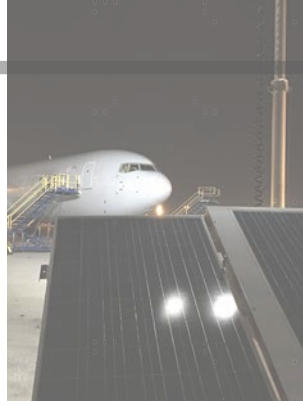


 Greenshine

OUTDOOR SOLAR LIGHTING SOLUTIONS



# MOBILE SOLAR TOWER

# GS-LT-400 | GENERAL SPECIFICATIONS



Greenshine

## Light Fixture (4\*GS-LED-LT-400)

Luminaire Input Voltage	DC 12V   24V
Power Consumption	4 X 100W
Lumen	60,000 lumens
Color Temperature	5000 K
IES Lighting Type	Flood Optic   60°
Material	Die-cast aluminum

## Solar Panel (3 Units) **435W**

Rating Power	435 W
Maximum Power Voltage	33.04 V
Maximum Power Current	13.17 A
Open Circuit Voltage	39.33 V
Short Circuit Current	14.22 A
Size	67.79" x 44.64"(1 Unit)
Weight	45.85 lb (1 Unit)

## Battery (6 Units)

Battery Type	GEL Deep Cycle Lead-Acid
Operating Voltage	DC 24 V
Capacity	6 x 12 V 200AH
Dimensions	16(L)x7(W)x9.2(H) (in)
Expected Life	5 ~ 7 years

## Operation

Charging Time	12 Hours
Operate Time	18 hours for 4 x 100W
Voltage	DC 24 V

## Mast

Type	Round
Materials	6063 aluminum alloy
Mast Height	19' (Extended)   6'3" (Retracted)
Stage	4
Mast Raise	Manual Lift



# GS-LT-400 | GENERAL SPECIFICATIONS



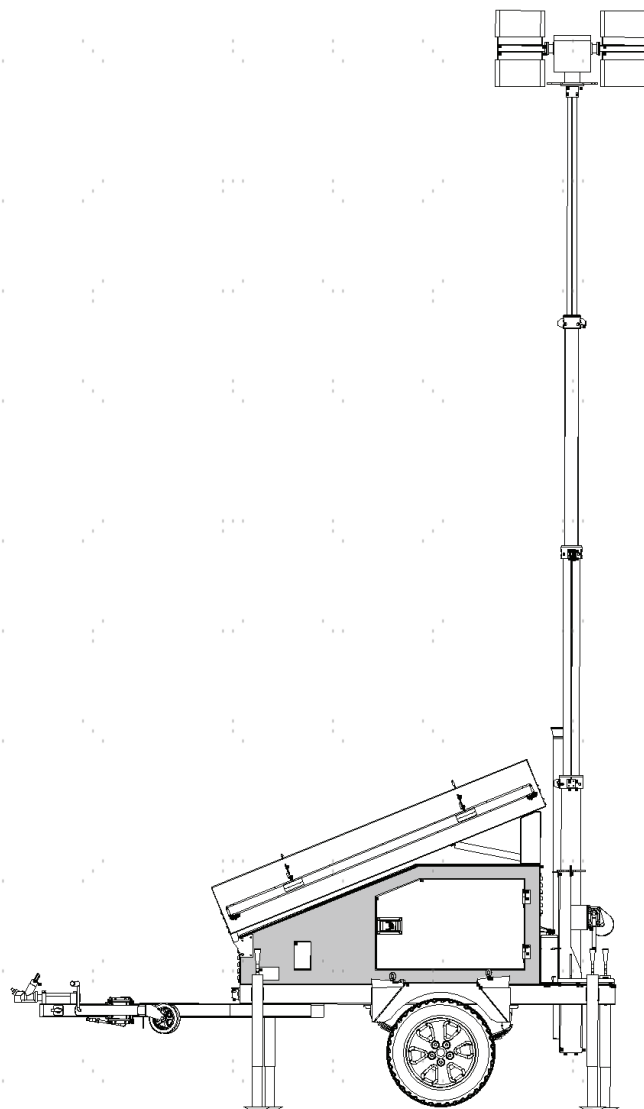
Greenshine

## Canopy

Type	2mm cold-rolled steel
Finish	Powder Coating
Color	White

## Trailer

Type	Single Axel
Tire and rim size	185R 14C
Stabilizers	4 adjustable manual stabilizers
Drawbar	Complies with U.S. D.O.T.



# GS-LT-400 | GENERAL SPECIFICATIONS

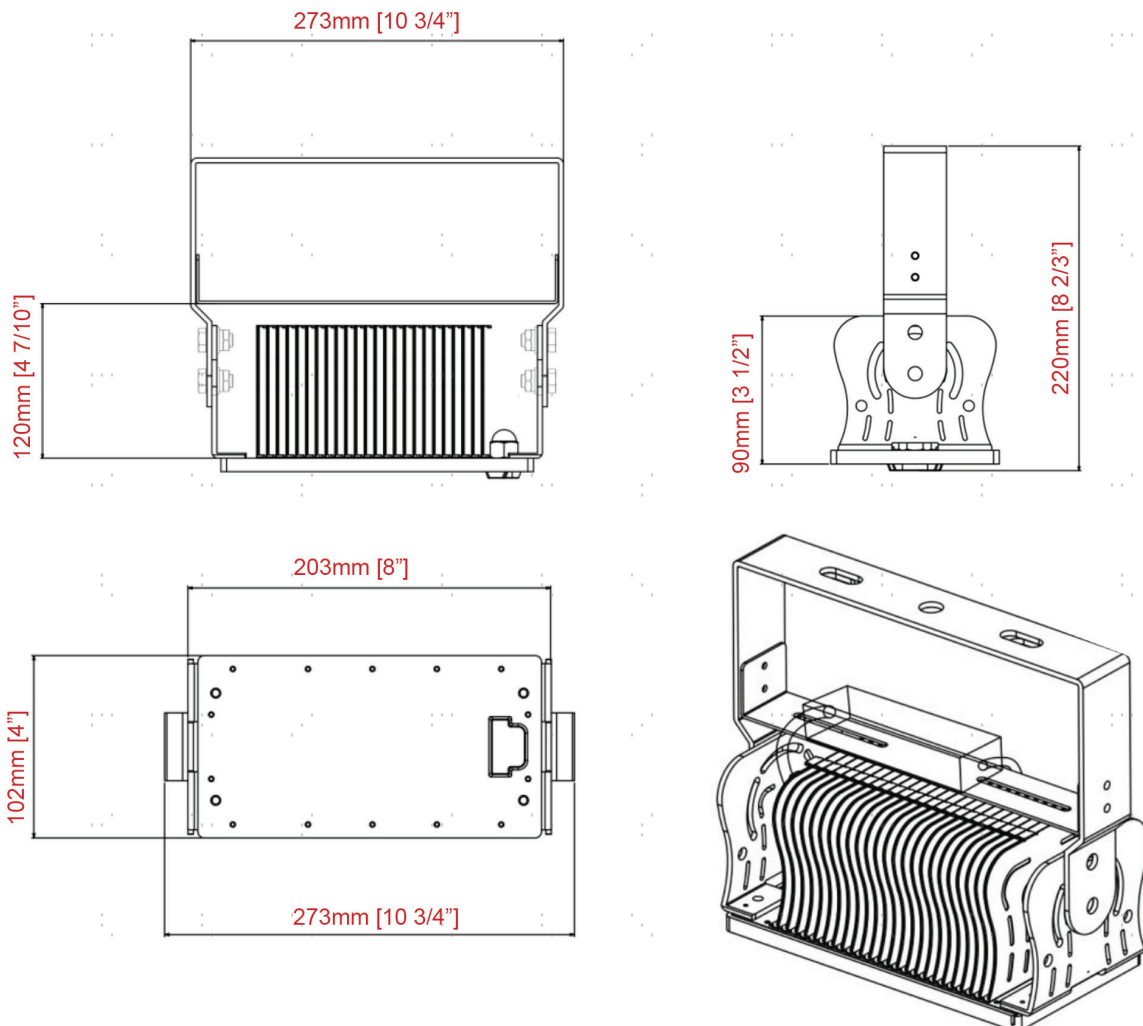


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## SPECIFICATIONS

Luminaire Input Voltage	DC 24V
Power Consumption	4 X 100W
Lumen Output	60,000 lumens
Color Temperature	5000 K
IES Lighting Type	Flood Optic
Material	6063 Aluminum alloy
IP Class	IP 65
Insulation	Class I
Operating Temperature	-30°C ~+50°C / -22°F ~+122°F
CRI	≥70

## DIMENSIONS



# MOBILE SOLAR TOWER SERIES

## Solar Powered LED Lighting System



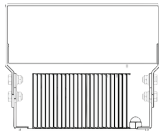
### OVERVIEW

The Mobile Solar Tower Series features customizable outdoor solar light solutions depending on your specific application and an adjustable mounting bracket. Each system is completely customized according to your location, project and lighting requirements; also systems can be configured to run throughout the night or have them dim to save energy when full light is not required and with the option for a motion detection.

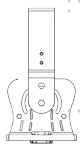
**PART NUMBER: GS-LT-400**

#### FIXTURES

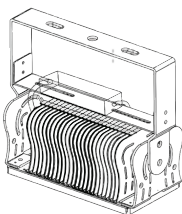
##### Flood Lights



**FRONT VIEW**  
50W-100W



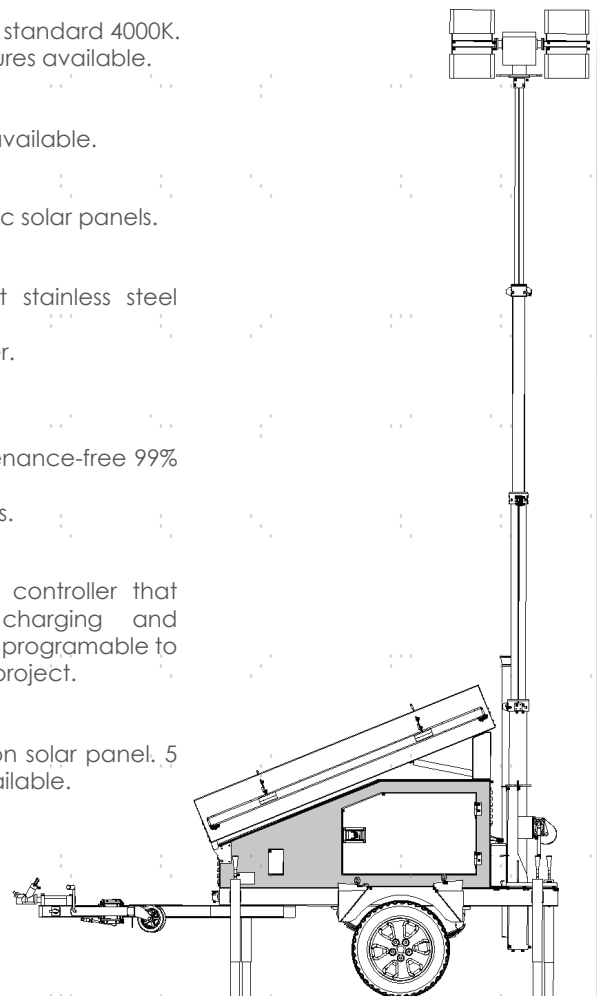
**SIDE VIEW**



**ISOMETRIC VIEW**

#### SPECIFICATIONS

- ▶ **Luminaire**
  - 60,000 hours.
  - 3000K - 5000K available with standard 4000K.
  - Turtle Friendly compliant fixtures available.
- ▶ **Panel Mount**
  - Rated to 145mph. 185mph available.
- ▶ **Solar Panel**
  - Mono-crystalline Photovoltaic solar panels.
- ▶ **Battery Enclosure**
  - Vented, corrosion resistant stainless steel battery box.
  - Holds battery and controller.
  - Includes lock.
- ▶ **GEL-Type Battery**
  - Greenshine Battery - Maintenance-free 99% recyclable.
  - 200Ah seal GEL Cell batteries.
- ▶ **Smart Controller**
  - Controller - Solar Charge controller that monitors and regulates charging and discharging of batteries. Also, programable to specific operating profile for project.
- ▶ **5 Year Limited Warranty**
  - Includes 10 year warranty on solar panel. 5 and 10 Year Full Warranty available.



# GREENSHINE GEL-TYPE BATTERY

Solar Powered LED Lighting System



Greenshine

## OVERVIEW

GEL deep cycle battery with a 12 years floating design life is especially designed for frequent cyclic discharge under extreme temperature.



### GS-GEL-H200

Cells per unit	6
Voltage per unit	12V
Capacity	200Ah @ 20hr-rate to 1.75V per cell @ 25°C / 77°F
Weight	56.5 kg / 124 lb
Dimensions L x W x H	522 x 218 x 240(mm) 20.5" x 8.5" x 9.5"
Max Discharge Current	1500A (5 Sec)
Operating Temp. range	-40°C~60°C   -40°F~140°F
Flot Charging Voltage	13.6 to 13.8 VDC / unit average at 25°C / 77°F
Recommended max. charging current	30A
Self-discharge	Valve Regulated Lead Acid can be stored for more than 6 months at 25°C/77°F. Self-discharge ratio less than 3% per month at 25°C/77°F. Please charge batteries before using.
Equalization and cycle service	14.6 to 14.8 VDC / unit average at 25°C / 77°F
Terminal type	5ft cooper wire leads from the battery case



Greenshine

# GREENSHINE GEL-TYPE BATTERY

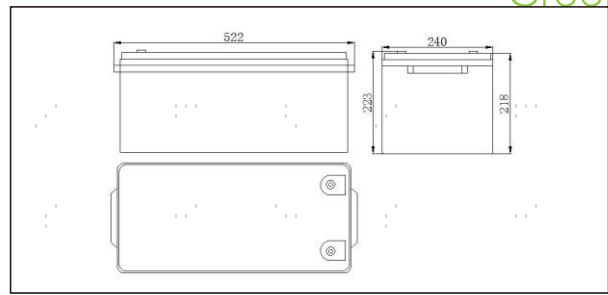


## Specifications

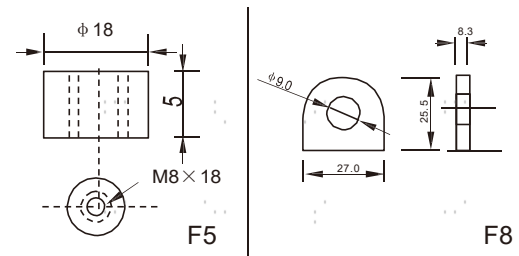
Nominal Voltage	12V	
Rated capacity (10 hour rate)	200Ah	
Dimensions	Total Height	223 ± 3 mm
	Height	218 ± 3 mm
	Length	522 ± 3 mm
	Width	240 ± 3 mm
Weight Approx	56.5 ± 1.2 Kg	

## Characteristics

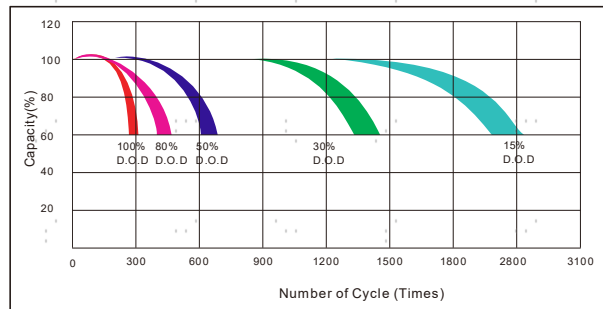
Capacity 25°C(77°F)	20 hour rate(10.9A)	218.0Ah
	10 hour rate(20.0A)	200.0Ah
	5 hour rate(34.0A)	170.0Ah
	1 hour rate(113.0A)	113.0Ah
Capacity affected by Temperature (10 hour rate)	40°C(104°F)	102%
	25°C(77°F)	100%
	0°C(32°F)	85%
	-15°C(5°F)	65%
Self-Discharge at 25°C(77°F)	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
	Capacity after 12 month storage	64%
Charge (constant Voltage)	Cycle	Initial Charging Current less than 50.0A
	Float	13.5-13.8V



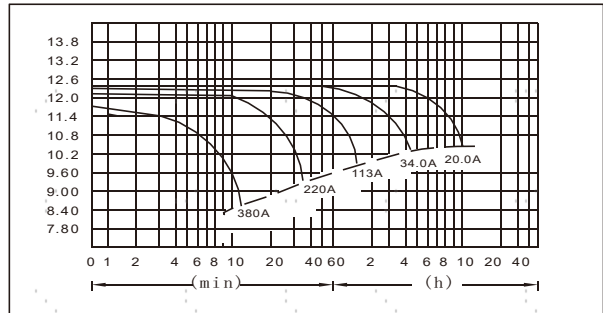
## Terminal Type



## Cycle Life 25°C(77°F)



## Discharge Curves 25°C(77°F)



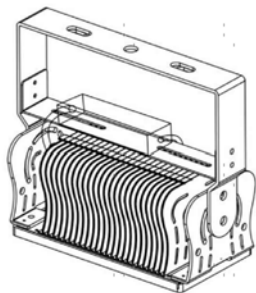
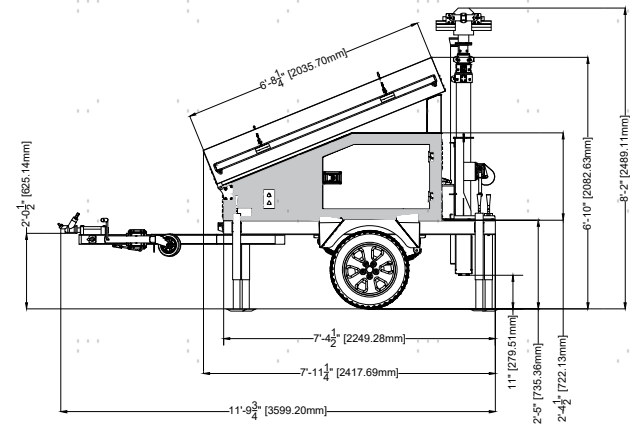
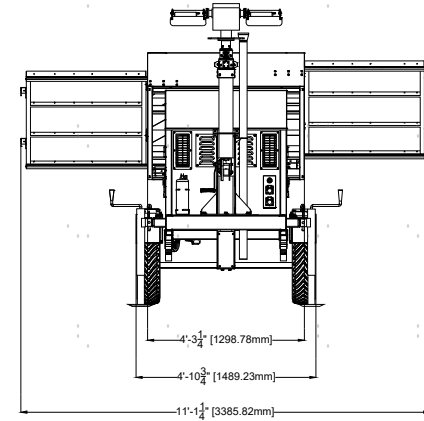
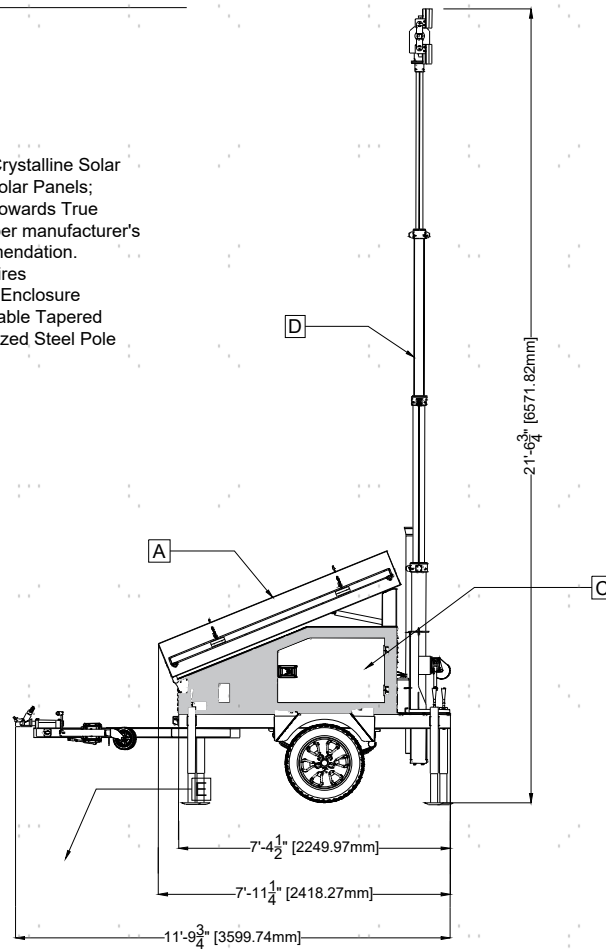
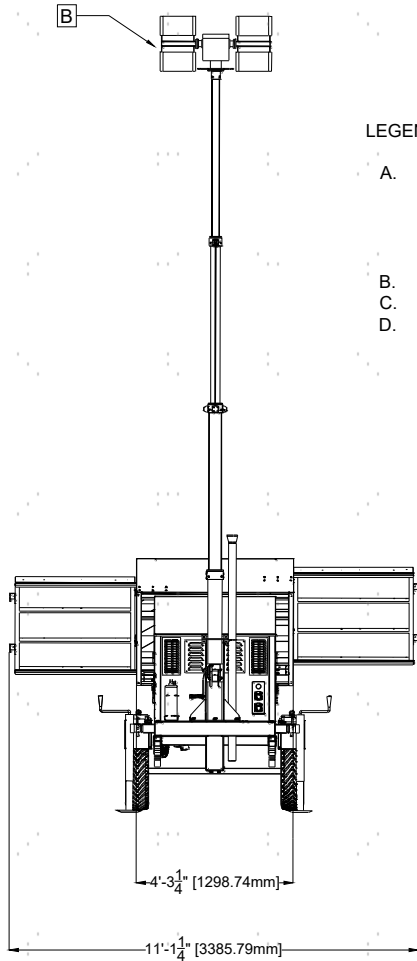
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		10min	30min	1h	2h	3h	4h	5h	8h	10h	20h
		9.60V	A	380	220	110	70	52	42	35.6	23.2
	W	3731	2120	1130	665	517	415	348	244	215	113
10.20V	A	365	208	113	66.8	51	41	34.8	22.8	20.7	11.2
	W	3678	2062	1102	658	507	409	339	236	211	111
10.50V	A	340	194	112	65.2	50	40	34	22.5	20.2	11.0
	W	3351	2020	1094	654	504	405	326	228	208	109
10.80V	A	320	180	106	63.6	49	39	30.4	21.9	19.5	10.4
	W	3196	1886	1068	647	500	400	312	224	205	107
11.10V	A	300	168	100	62	47	38	29	21.3	19.0	10.0
	W	3036	1707	1021	638	486	394	301	222	202	106

# GS-LT-400

## LEGEND

- A. Mono-Crystalline Solar Cell - Solar Panels; Orient towards True South per manufacturer's recommendation.
- B. Luminaires
- C. Battery Enclosure
- D. Retractable Tapered Galvanized Steel Pole



- Drawings are based using hot-dipped galvanized steel, powder coating with a thickness of 5  
 - \*EPA of the system exclude the EPA of the pole, includes the solar panels, brackets, arm and LED fixture and battery box.  
 - \*\*Wind resistance of the poles are indicative and further customization can be provided.

Tilt angle of the solar panels	30
EPA (ft <sup>2</sup> )	13.3
Wind resistance** (mph)	40

System	Mobile Solar Tower - 3P
By	Luis Jimenez
Date	6/9/2021
Website	www.streetlights-solar.com





# GREENSHINE NEW ENERGY



Greenshine

## 5 YEAR LIMITED WARRANTY

Greenshine New Energy provides a 5 year limited warranty on its solar lighting system. Greenshine will, at its option, repair or replace any Greenshine system that is defective. Additionally, certain components within Greenshine's system have extended warranty protection against failure as defined below:

COMPONENT	WARRANTY
*Solar Panel	20 Years
Pole and Mounting Brackets	5 Years
LED Light Fixture	5 Years
Electronics (Controller, driver)	5 Years
**Battery	5 Years

\* Greenshine New Energy warrants that the power output of the PV Modules will be at least 80% of the minimum Peak Power rating for 20 years, and warrants that for 20 years beginning on the Warranty Start Date, its photovoltaic modules, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions.

Specific restrictions may apply due to site-specific conditions, please check quote's details for more information.

This warranty does not cover damage or malfunction, as determined by Greenshine service technicians or engineers, due to abuse, misuse, incorrect installation, or accident such as, but not limited to:

- Failure to follow storage, installation, operation, and maintenance instructions provided by Greenshine
- Vandalism, theft, lightning, flood, "Acts of God", and other problems beyond the control of Greenshine
- Unauthorized or improper repairs or adjustments including use of any replacement parts not provided by Greenshine.
- Deployed in an abnormal or inconsistent manner from Greenshine New Energy written and verbal instructions
- Greenshine New Energy liability and Purchaser's remedy under Greenshine New Energy warranty is limited to the replacement of any defective item, but under no circumstance shall exceed the purchase price of the goods. Other warranties may be available for an additional cost with additional coverage and/or labor allowance included.
- Any repair cost not approved by Greenshine New Energy will not be reimbursed.
- Purchaser is responsible for any and all costs involved to service and/or replace defective good including labor, shipping, and rental of equipment.

\*\*Greenshine New Energy provides a limited warranty for battery replacement with the following prorated coverage:

- 0 to 2 years: 100% credit (user pays 0% of the replacement battery price)
- 2 to 3 years: 60% credit (user pays 40% of the replacement battery price)
- 3 to 4 years: 40% credit (user pays 60% of the replacement battery price)
- 4 to 5 years: 20% credit (user pays 80% of the replacement battery price)