## JouleBox 500

The **JouleBox** is an Energy Storage Solution based on Li-ion battery chemistry specifically designed for use with DC appliances. The **JouleBox** has a storage capacity of 500kJ and can supply up to 600.000kJ (600 MJ) over it's battery lifetime which depending on it's daily usage and rate of discharge will give a useful service life of 3 up to 10 years.

The **JouleBox** can be charged from LEC200 up to LEC1500 (or any type of 36 Cell 20Wp to 100Wp PV solar panel with Vmpp of 17.5V).

The **JouleBox** has 2 universal outputs to supply any DC appliances that can run from 12 to 16VDC source. Typical appliances that can be used with the **JouleBox** are Sundaya LCD TV of 18" up to 24" and Ceiling fans of 30 up to 120cm diameter.

The **JouleBox** also has 2 USB ports for charging USB devices like mobile phones and Tablets. Furthermore it is equiped with 2 docks with Bayonet fitting to recharge Sundaya JouleSticks that can be used in all Sundaya Portable products. The integrated electronics of the **JouleBox** take care of the health management of each cell's capacity to ensure a long life of the storage system. The electronics also protect against short circuit, overload, and overusage. A state of charge indicator provides information about the energy content in the **JouleBox** and an Audible alarm warns the user when **JouleBox** is 10% and 5% away from automatic cut-off when energy is depleted.

580 kl

500 kJ

2 pcs

2 pcs

2 pcs



Lifetime Energy Supply Capacity		
<ul><li>@ 1 hour discharge rate</li><li>@ 2 hour discharge rate</li><li>@ 4 hour discharge rate</li><li>@ 8 hour discharge rate</li></ul>	150.000 kJ 300.000 kJ 450.000 kJ 600.000 kJ	
Charging details	000.000 kj	
Max Charging Capacity (per hour) Max Charging Capacity (per second) Max Charge Current	400 kJ/h 110 J/s (W) 8 A	
Discharging details		
Max Discharging Capacity (per hour) Max Discharging Capacity (per second) Max Discharging Current Output Voltage Range	250 kJ/h 70 J/s (W) 5 A 12-16 VDC	

Energy

Energy Content Energy Available for usage

**Input / Output Ports** 

Charging input port (5.5-2.0mm socket)

Load Output port (4.0-1.6mm socket)

USB output socket 5V, 2A

JouleStick Charging Dock 5V, 1A

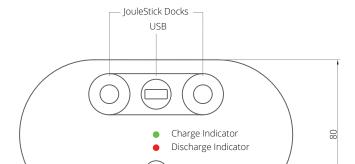
Length Width Height Mass	146 cm 80 cm 101 cm 1.250 gr	
Protections		
Protection on Inputs	Over Voltage Cut-off Over current Protection Reverse Polarity protection Reverse current protection Voltage surge protection	
Protection on 12-16 V Outputs	Under Voltage Cut-off Over Load Protection Short Circuit Protection Reverse current protection	
Protection on USB Outputs	Over Load Protection Short Circuit Protection	
Others		
Electronic Master On/Off Switch State of Charge Indicator by green LED (activated upon switch press)  Audible Alarm	Yes 5 Blinks = 100% 4 Blinks = 80% 3 Blinks = 60% 2 Blinks = 40% 1 Blink = 20% at 10% before Low Voltage cut off	
Low Voltage Cut-Off indicator	at 10% before Low Voltage cut off at 5% before Low Voltage cut off by Red LED	

**Product Dimensions** 



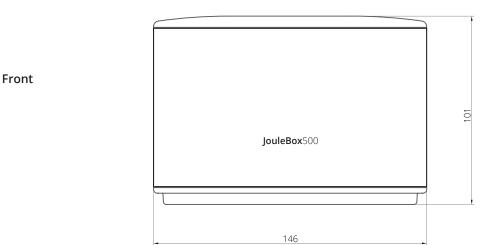
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## **Mechanical Dimensions**



Switch

Top



**Bottom** 

