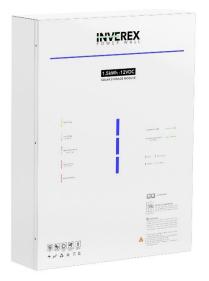


Part Number: KWL-INV-1500-12-D-1C-M-SD-A-X-X-I | Version Date: November 2020



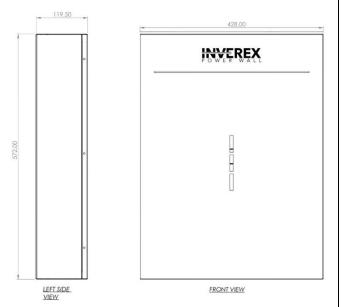


The INVEREX Power Bank is supercapacitor-based wall mount storage that uses supercapacitors as storage cells instead of chemical cells. It has balancing, control and charge retention algorithms that control the operation of the supercapacitor-based Modules, making INVEREX Power Bank a safe, efficient and effective alternative to chemical batteries wherever chemical batteries are deployed.

PERFORMANCE SPECIFICATIONS	
DC Energy	1500WH
DC Voltage (Nominal)	12V <sub>dc</sub>
Technology	Supercapacitors
CHARGE SPECIFICATIONS	
Maximum Charge Current (5 sec)	750A (6C)
Recommended Charge Current	125A (1C)
Full Charge Voltage	14.2 V <sub>dc</sub> (automatic)
Maximum Charge Voltage Tolerance	20V <sub>dc</sub> (automatically adapts to charger settings)
DISCHARGE SPECIFICATIONS	
Maximum Discharge Current (5 sec)	750A (6C)
Maximum Discharge Current (Continuous)	125A (1C)

Depth of Discharge Voltage @

0.5C



MECHANICAL SPECIFICATIONS		
Dimensions (W x H x D) mm	428 x 572 x 119.5	
Weight (Kg)	30	
Module Casing Material	GI Powdered	
Terminal Type	Anderson Connectors	
Mounting Options	Wall Mount	
Enclosure	IP65	

Inverex Power Wall is an OFS (Open Frame Sirius) project carrying Sirius<sup>®</sup> inside.

 $10V_{dc}$ 



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SMART FEATURES	
Communication and Connectivity	WIFI & Bluetooth
Alarm	LED and Buzzer alarm in the event of Over/Under-Voltage, Over-Current, Over Temperature

### **ENVIRONMENTAL SPECIFICATIONS**

Cell Operating Temperature <sup>1</sup>	-10°C to 55°C

Operating Humidity Non-Condensing

# MODULE SERVICE LIFE

Projected Cycle Life <sup>2,3</sup>	12000 cycles

Projected Calendar Life<sup>3,4</sup> 8 years

Shelf Life⁵

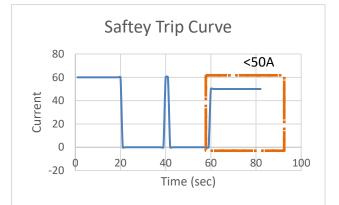
Can be stored at any Warehousing SOC without affecting cycle life

10 years

### **COMPLIANCE INFORMATION<sup>6</sup>**

EN55032:2015, EN55024:2010, EN61000-4-2:2009, EN61000 EN61000:2008+A2:2010

### SAFETY TRIP CURVE



#### SIRIUS VIEW FOR INVEREX APP

Module Monitoring	Total Cell Voltage,
	Individual Cell
	Voltages, Current,
	Temperatures,
	Instantaneous Power,
	Circuit Breaker Status,
	SOC and Energy
	Consumed

SAFETY PERFORMANCE	
Over/under voltage	Hardware protection, Module shut down
Over Current	Hardware protection, Module shut down
Over temperature	Hardware protection, Module shut down
Short Circuit Protection	10KA, Hardware Protection, Terminal Cut-off
Additional Safety	125A 2P Mechanical Actuated Circuit Breaker
Reverse Voltage Protection	Hardware Protection, the buzzer alarms

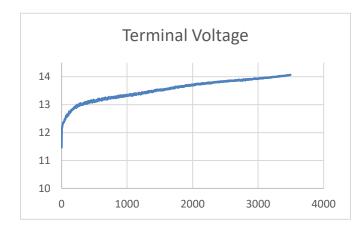
Inverex Power Wall is an OFS (Open Frame Sirius) project carrying Sirius<sup>®</sup> inside.

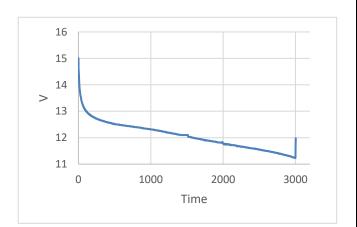


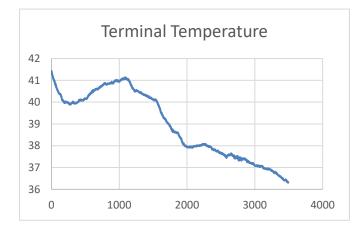
Part Number: KWL-INV-1500-12-D-1C-M-SD-A-X-X-I | Version Date: November 2020

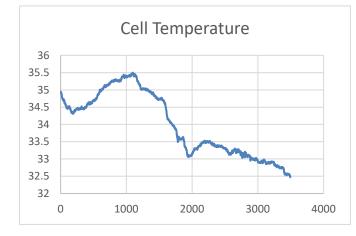
### **CHARGE SPECIFICATIONS**

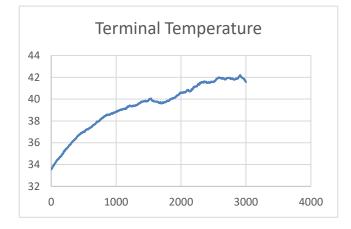
### **DISCHARGE SPECIFICATIONS**

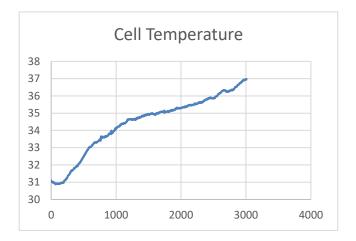












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<sup>1</sup>The temperature range indicates the range in which the supercapacitor cells can operate. The performance of the cells may vary if they are continuously operated outside a temperature range of  $-10^{\circ}$ C to  $55^{\circ}$ C, and/or at C-rates higher than the maximum charge/discharge rate specified in this spec sheet. The operating temperature range of the Module varies based on the application. If the Module is to be operated continuously outside a temperature range of  $-10^{\circ}$ C to  $55^{\circ}$ C, and/or at C-rates higher than the maximum charge/discharge rate specified in the spec sheet, please consult Kilowatt Labs or its Reseller prior to deploying.

<sup>2</sup>Projected life of supercapacitor cells. Cycle life will vary if cycled more than 4 times a day.

<sup>3</sup>Additional terms and conditions, including a limited warranty, will apply at the time of purchase.

<sup>4</sup>Projected Calendar life of supercapacitor cells from the date of first operation.

<sup>5</sup>Shelf life is the life of the Module (in years) from the date it is manufactured to the time it is first operated.

<sup>6</sup>CE certification is completed for supercapacitor cells. Product dimensions are for reference only unless otherwise identified and may change without notice. For critical applications, please contact your Reseller.

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