

GRAPHENE SUPER CAPACITOR ENERGY STORAGE MODULE



REPRESENTED BY
ATD ENERGY P/L

FEATURES

- * Graphene supercapacitor cells
- * Safest technology
- * Ultra long cycle life
- * Extreme temperature
- * Highest energy transfer efficiency
- * Easy to install
- * Rarely maintenance



Part Number	ATDE-EM-48V3600-E	ATDE-EM-48V5500-E	ATDE-EM-48V7600-E
Energy storage	3.6KWh	5.5KWh	7.6KWh
Nominal Voltage	51.8V/DC	51.8V/DC	51.8V/DC
Maximum Charge Voltage	58V/DC	58V/DC	58V/DC
Discharge Cut-off Voltage	42V/DC	42V/DC	42V/DC
ESR/AC @1KHz 50% SOC	<15mΩ	<10mΩ	<8mΩ
Max. Continuous Charge Current	100A	100A	100A
Max. Continuous Discharge Current	100A	100A	100A
Cells Self-discharge Rate	2% per month	2% per month	2% per month
Round Trip Efficiency*1	95%	97.8%	97.5%
Projected cycle life(25°C)	20000 times	20000 times	20000 times
Projected life(25°C)	15 years	15 years	15 years
Recommended Depth of Discharge	≤90%	≤90%	≤90%
Maximum Depth of Discharge	100%	100%	100%
Cooling Method	Natural	Natural	Natural
Shell Material	Metal & ABS plastic	Metal & ABS plastic	Metal & ABS plastic
Parallel Connection	Up to 10sets	Up to 10sets	Up to 10sets
Monitoring Data	System voltage,current, temperature,SOC,SOH,cycle,cell's voltage	System voltage,current, temperature,SOC,SOH,cycle, cell's voltage	System voltage,current, temperature,SOC,SOH,cycle, cell's voltage

COMPLIANCE INFORMATION

Safety*2	IEC62619
Transport	UN38.3,MSDS
CE	EN 62133:2013, EN 55032:2015+AC:2016, EN 55035:2017, EN 61000-3-2:2014, EN 61000-3-3:2013
Environmental	RoHS
Compatible Inverters	Deye

ENVIRONMENTAL SPECIFICATIONS

Environmental Protection	IP20
Operating Humidity	0~90% RH Non-condensing
Charge Temperature	0°C~+55°C
Discharge Temperature	-20°C~+60°C
Storage Conditions	-20°C~+40°C, 25% ~ 95%RH SOC>30%, one full charge needed per two months

Remark:*1 (1)At room temperature 25°C, charge-discharge at 100A.(2)Limited charge at 100A for resident energy storage, (3)At the beginning of life.

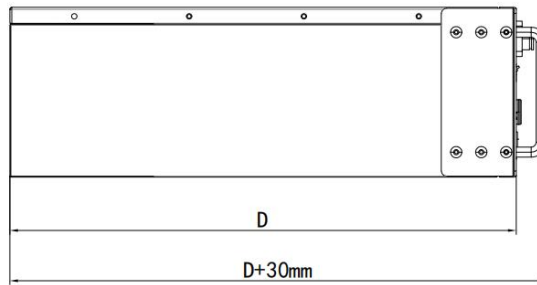
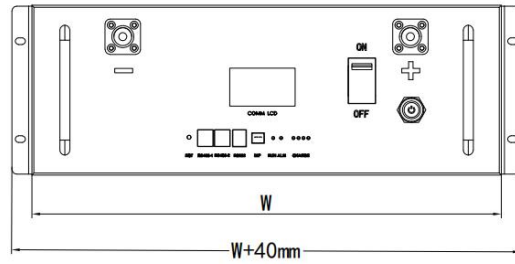
*2on testing,certificate will come soon.

GRAPHENE SUPER CAPACITOR ENERGY STORAGE MODULE

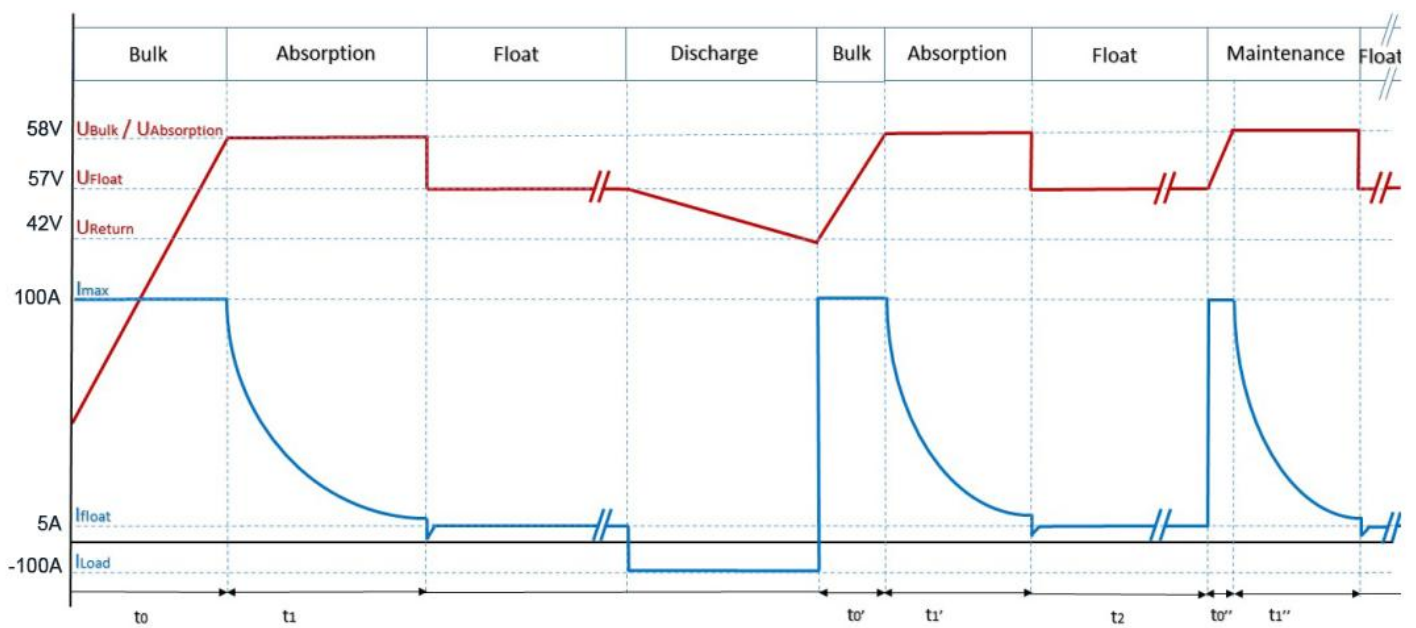
MECHANICAL SPECIFICATIONS

Part Number	ATDE-EM-48V3600-E	ATDE-EM-48V5500-E	ATDE-EM-48V7600-E
Weight	42Kg	38Kg	50Kg
Dimensions(WxDxH)	470x507x170(mm)	470x415x170(mm)	470x520x170(mm)
Mount Options	On floor	On floor	On floor

Dimensions and weight differ slightly for each batch. Contact ATD Energy for additional information.



CHARGING-DISCHARGING CURVE



Note: If the charger needs to set the floating charge voltage, it is recommended to set the U_{Float} value to 57V.