

Durathon® Battery



Technology Engineered by General Electric Company and AM Power under

General Data		
Nominal Energy	2.85	kWh
Nominal Capacity	92	Ah
Ambient Conditions ¹	-40 to 65	°C
Humidity	<95% (no condensation)	RH
Altitude	<3,000	m
Warm-up Time ²	<16 (from 25°C)	hours
Max Internal Heater Power	200	W
Avg Heater Power Consumption, CDC ¹	<10	W
Heater Power Consumption, Float	<90	W
End of Discharge Voltage ²	24	Vdc
Dimensions ³ (H×D×W)	353×356×506	mm
Weight	51±2	kg
Design Life	20	yrs
Battery Certifications	UL9540A, CE, UL1973, IEC62984 (in progress)	

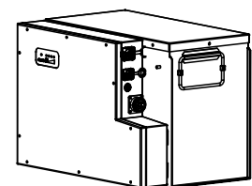
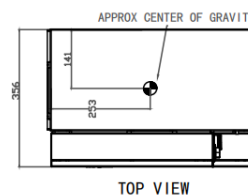
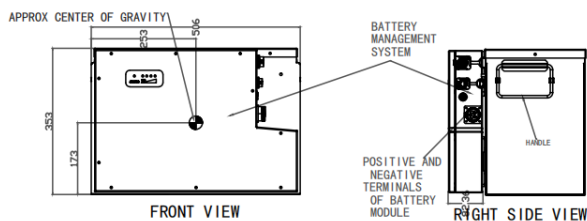
Technical Data

Basic Parameters		
Usable Energy ⁴	2.2	kWh
Usable Capacity ⁴	80	Ah
Max Recharge Current	16	A
Recharge Voltage Range	30 to 40	Vdc
Open Circuit Voltage	30.96	Vdc

Operating Parameters		
Continuous Load Range	0.24 to 0.7	kW
Continuous Discharge Current	8 to 24	A
Max Discharge Current(1h)	60	A
Max Discharge Current(1min)	120	A
Cycles Between Return to Top of Charge (TOC) ⁵	40	cycles

Others	
Battery Terminals	Quick Plug Terminal
Ground Connection	M6 Hex Nut
Communication	RS485, MODBUS
Communication Protocol	CAN/LAN
Ingress Protection (IP)	IP55
Operating Status Lights	1 LED (3 states)
SOC Status Lights	4 LEDs

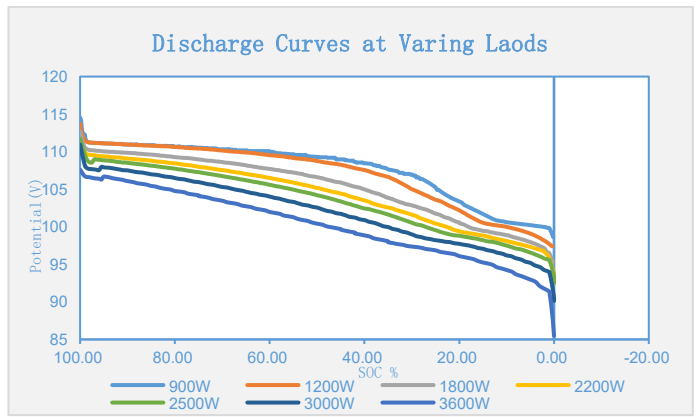
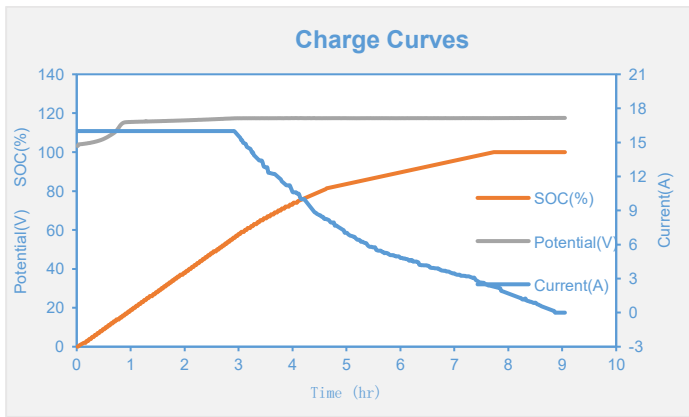
Dimension



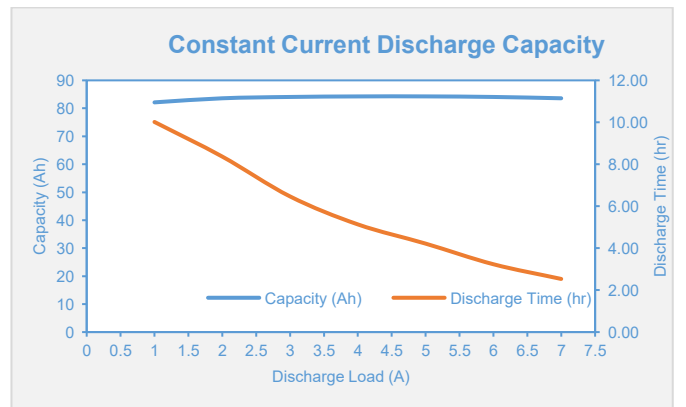
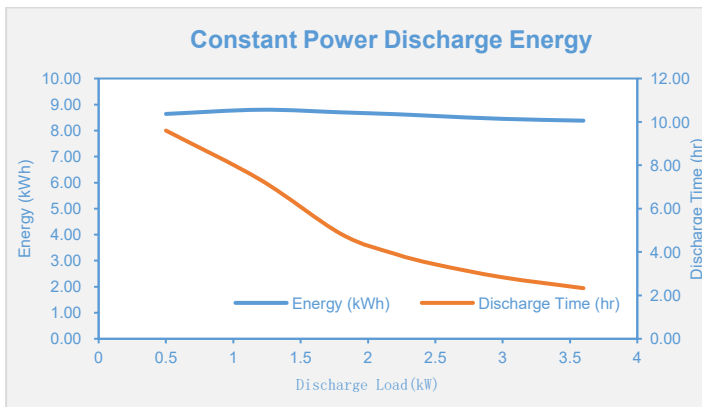
ESTIMATED BATTERY MODULE WEIGHT = 51KG

Performance Characteristics

The performance data presented below is based on testing done at labs at 25°C and applies to ambient temperatures from -40°C to 65°C at beginning of life (BOL). Actual performance may vary. Discharge curves apply after 24-hour charge cycle.



	From 13% State of Charge to...					
	50%	60%	70%	80%	90%	95%
Charge Time (hr)	2.6	3.1	3.7	4.5	6	7

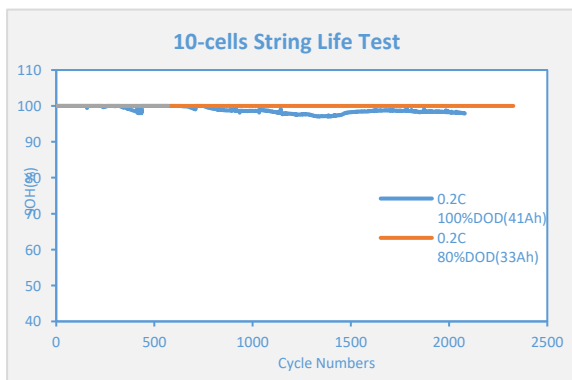


	Load (W)						
	900	1,200	1,800	2,200	2,500	3,000	3,600
Energy (kWh)	8.64	8.8	8.7	8.63	8.56	8.45	8.38
Discharge Time (hr)	9.60	7.33	4.83	3.92	3.43	2.83	2.33

	Current (A)						
	8.2	10	13	16.4	20	26	33
Capacity (Ah)	82.13	83.59	84.07	84.26	84.27	84.07	83.59
Discharge Time (hr)	10.02	8.37	6.47	5.13	4.22	3.23	2.53

Cycle Life Projection – At Varying Loads

The performance data presented below is the lab testing results at ambient temperature(25°C). Based on the testing results, the predicted cycle life at 0.5C 80%DOD is >6000 cycles with >80%SOH.



- 1 When continuously charged and discharged at rated load.
- 2 Exact voltage is load dependent. Extendable end of discharge voltage up to 80V during overload discharge.
- 3 Dimensions are nominal.
- 4 C/10 rate at beginning of life.
- 5 Battery does not need to be taken offline to return to top of charge.

Distributed by:

Thytron Energy Sdn Bhd
 (Formerly Known as Thytron Power Products Sdn Bhd)
 31, Jalan Taming 10, Kawasan Perindustrian Taming Jaya, 43300 Balakong,
 Selangor, Malaysia.

Tel: 03-89619005