

Lithium Battery Module

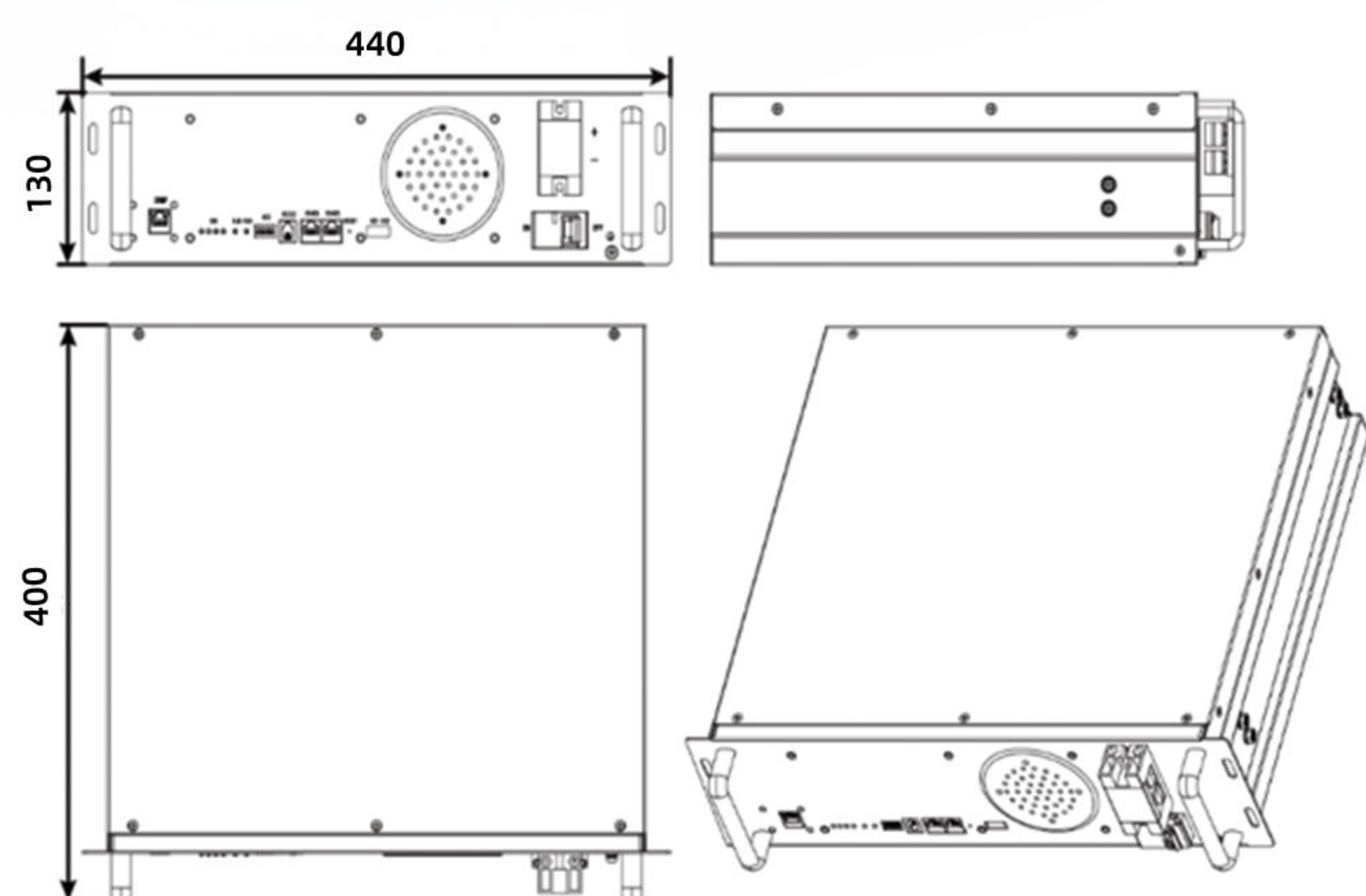
► VT48100E



Intelligent lithium battery, integrated with self-designed BMS, developed and produced by Vestwoods can be widely used in various telecom and energy storage system such as indoor distribution stations, integrated base stations, edge stations, micro-cell stations, FTTX equipment, distributed power supply, standby and deep cycle ESS

Key Features

- High quality LFP cells from leading company
- Super energy density ≥ 123 Wh/kg
- High rate charge/discharge current @1C
- Long design life up to 15+ years @ 25°C
- High Efficiency between charge and discharge
- SOC/SOH dynamic updating
- CAN/Modbus/SNMP V2/SNMP V3 (optional)
- Multiple protection methods based on patented BMS
- Anti-theft solutions available



Specifications

Item	15S	16S
Nominal Capacity	100 Ah	100 Ah
Nominal Voltage	48 V DC	51.2 V DC
Rated Charge Voltage	54 V	57.6 V
Max. Continuous Charge Current	100 A	100 A
Discharge Cut-off Voltage	40.5 V	43.2 V
Max. Continuous Discharge Current	100 A	100 A
Temperature Range of Charge	0 °C~60 °C	0 °C~60 °C
Temperature Range of Discharge	-20°C ~60 °C	-20°C ~60 °C
Allowed Humidity Range	≤95% RH	≤95% RH
Weight	Approx. 39 kg	Approx. 42 kg
IP Protection Level	IP 20	IP 20
Dimensions (W*D*H)	440*400*130±2mm	440*400*130±2mm
Certificates	ISO9001, ISO14001, ISO45001, UL1642, IEC62619, IEC62620, CE-EMC, UL1973, UN38.3	

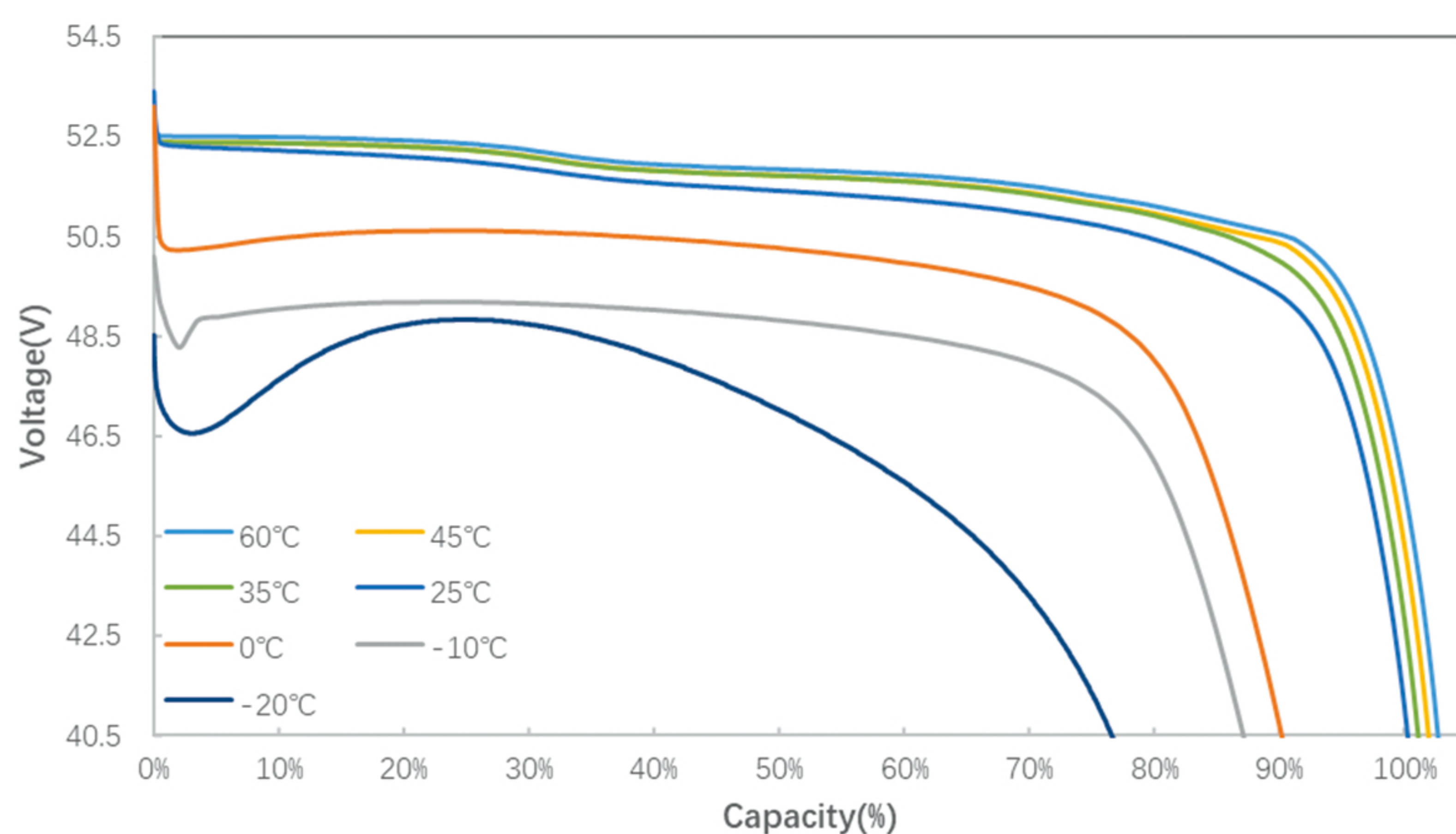
Discharge data with constant current/25°C

Current/A Time/h End Voltage/V	0.1C	0.2C	0.3C	0.4C	0.5C	0.6C	0.8C	1C
46.5 V	9.43	4.60	3.05	2.30	1.67	1.37	0.88	0.68
45 V	9.77	4.78	3.20	2.33	1.82	1.53	1.10	0.87
43.5V	10.00	4.88	3.28	2.43	1.93	1.57	1.18	0.92
42 V	10.18	5.00	3.35	2.46	1.98	1.65	1.22	0.95
40.5 V	10.30	5.15	3.40	2.54	2.00	1.67	1.24	0.98

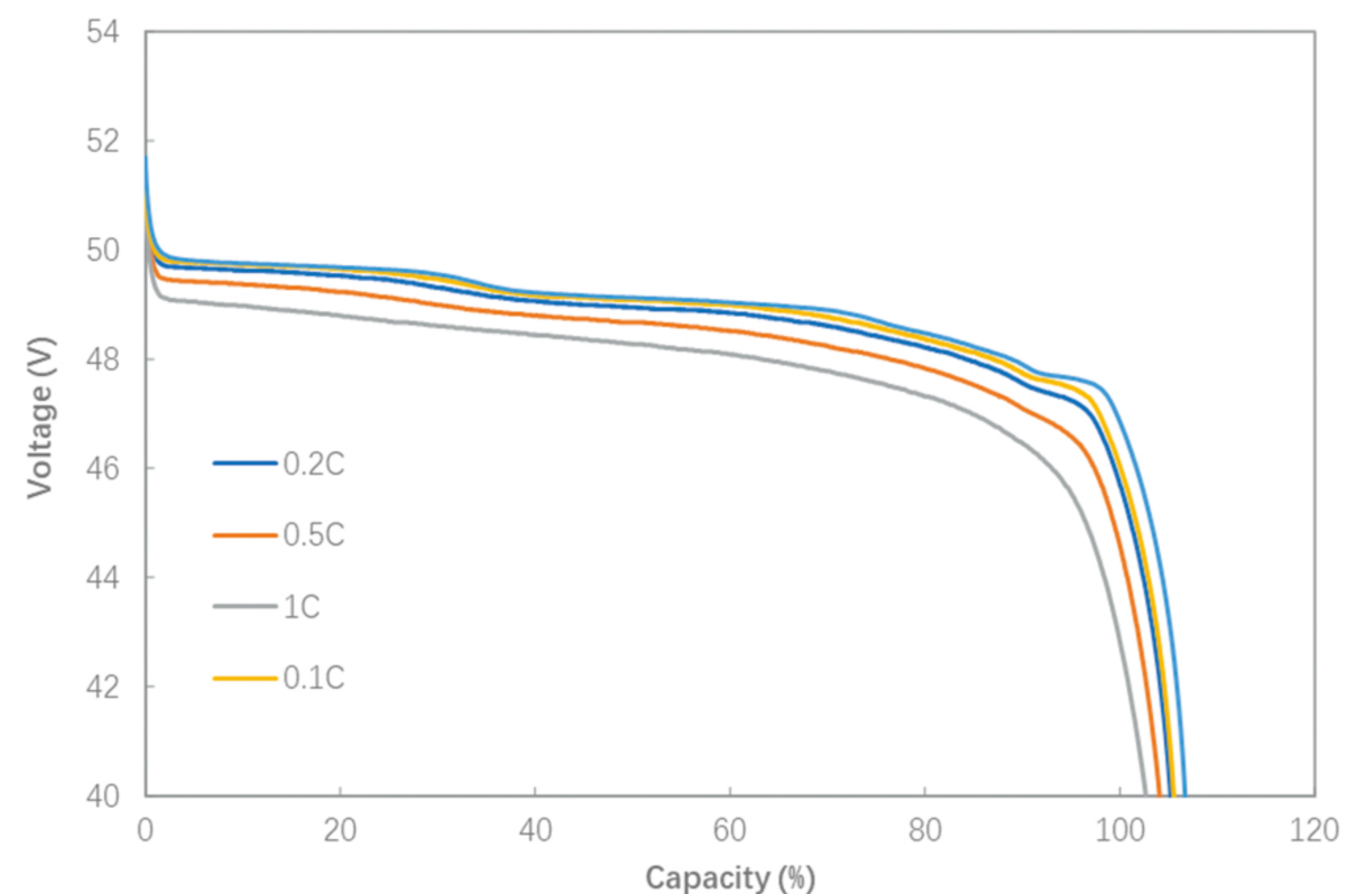
Discharge data with constant power/25°C

Power/W Time/h End Voltage/V	480	960	1440	1920	2400	2880	3840	4800
46.5 V	9.42	4.59	3.04	2.29	1.66	1.36	0.87	0.66
45 V	9.75	4.76	3.18	2.31	1.80	1.51	1.08	0.76
43.5V	9.97	4.85	3.25	2.40	1.90	1.54	1.15	0.82
42 V	10.14	4.96	3.31	2.42	1.94	1.61	1.18	0.90
40.5 V	10.26	5.11	3.36	2.50	1.96	1.63	1.20	0.95

Discharge Curves



Voltage vs. Discharge Capacity Percentage under different temperature



Voltage vs. Capacity Percentage with different constant current rate