

ST 47.2V 20AH-CPM Data Sheet

SoluThium
Powered by LiCore™ C

NOMINAL VOLTAGE / CAPACITY / ENERGY

47.2V / 19.6Ah / 925Wh

TYPE & CHEMISTRY

Lithium Battery / Lithium-Ion (NCA)

DIMENSIONS

11.3" (L) x 6.15" (W) x 3.35" (H)



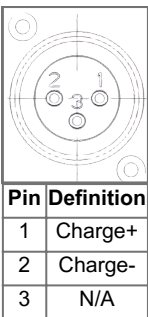
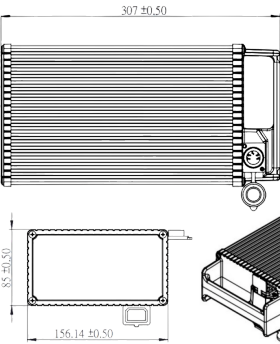
BATTERY SPECIFICATIONS

Model No.	ST 47.2V 20AH-CPM		
Chemistry	LiNiCoAlO ₂	Pack Configuration	13S4P
Nominal Voltage	47.2 V	Charge/Discharge Connector	94M007P2-1 / CPM3522-1AG
Capacity	19.6 Ah	Pairing Charger	Available
Energy	925Wh	Case	Aluminum
Weight	5.56kg ± 5%	Communication	SMBus
Nominal Dimensions	L 11.3" (287.4mm)	Charging Current	5A (max. 10A)
	W 6.15" (156.1mm)	Cont. Discharge Current	30A (max. 40A, 10s)
	H 3.35" (85mm)		
Certifications	Pending: UN38.3 IEC 62133-2		Indicators N/A

BMS SPECIFICATIONS

Over Charge Voltage Threshold	4.25V ± 0.025V/cell
Over Charge Voltage Release	4.0V ± 0.025V/cell
Over Discharge Voltage Threshold	2.8V ± 0.025V/cell
Over Discharge Voltage Release	3.3V ± 0.025V/cell
Over Discharge Current Protection	40A ± 1A
Over Discharge Current Release	10s
Short Circuit Protection	200A ± 1%
Balance Function	Yes
BMS Gauge	Read with SMBus: Voltage / Current / Temperature / Full Charge Capacity / Cycle Count

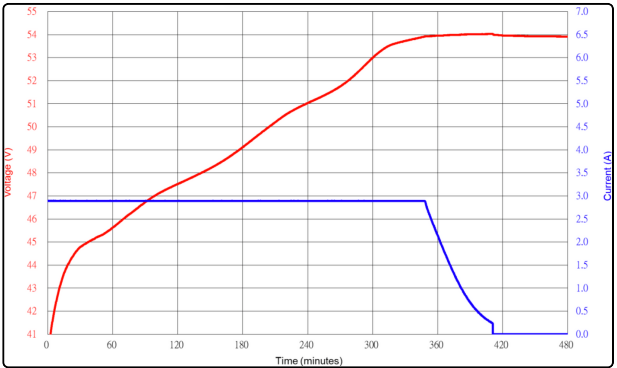
DRAWINGS



Pin	Definition
+	Positive
-	Negative
1	KEY_ON
2	KEY_GND
3	Reserve
4	Reserve

CHARGING CURVES

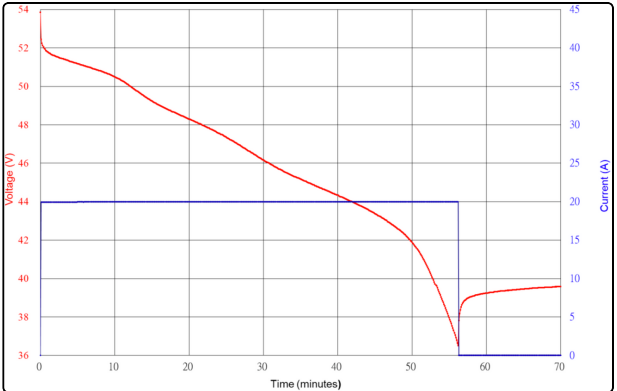
Charging profile: CC/CV mode, 53.95V charge voltage, 3A constant current, charge cutoff at 0.3A



Charge Current: 3A
Charge Time: 6.8 hrs

DISCHARGING CURVES

Constant current discharge at 20A until protection cutoff triggered by BMS



Discharge Current: 20A (1C)
Discharge Time: 0.6 hr
Temperature: 29.3°C increases to 60.6°C (31.3°C rise)