

ST 25.4V 24AH Data Sheet

NOMINAL VOLTAGE / CAPACITY / ENERGY

25.4 V / 23.76Ah / 603.74Wh

TYPE & CHEMISTRY

Lithium Battery / Lithium-Ion (NCA)

DIMENSIONS

12.2" (L) x 4.25" (W) x 3.15" (H)



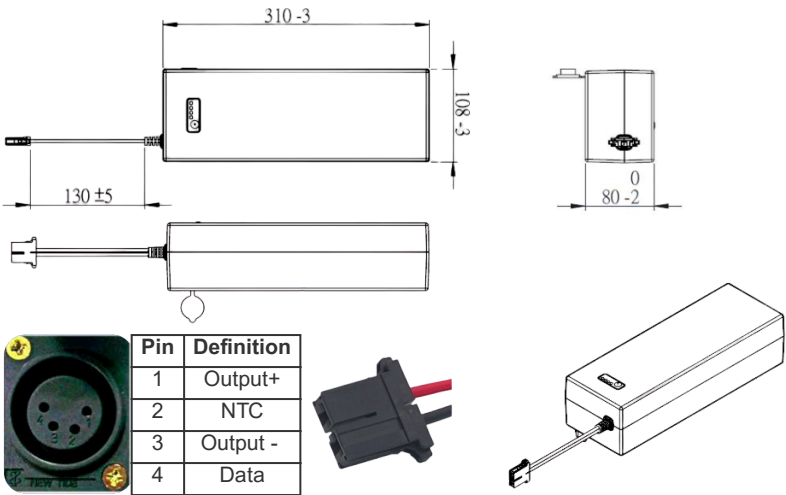
BATTERY SPECIFICATIONS

Model No.	ST 25.4V 24AH		
Chemistry	LiNiCoAlO ₂	Pack Configuration	7S5P
Nominal Voltage	25.4V	Charge/Discharge Connector	94M-0072-4PIN / AMP 179956-2
Capacity	23.76 Ah	Pairing Charger	Available
Energy	603.74Wh	Case	Plastic (PC/ABS)
Weight	3.25kg ± 5%	Communication	N/A
Nominal Dimensions	L	12.2" (310mm)	Charging Current 5A (max. 7A) Cont. Discharge Current 25A (max. 32A, 5s)
	W	4.25" (108mm)	
	H	3.15" (80mm)	
Certifications	In Progress: UN38.3 / EMC / IEC62133-2 / UL62133		Indicators 4 LEDs / Push Button

BMS SPECIFICATIONS

Over Charge Voltage Threshold	4.2V ± 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	32A ± 2A
Over Discharge Current Release	10s
Short Circuit Protection	250A ± 1%
Balance Function	Yes

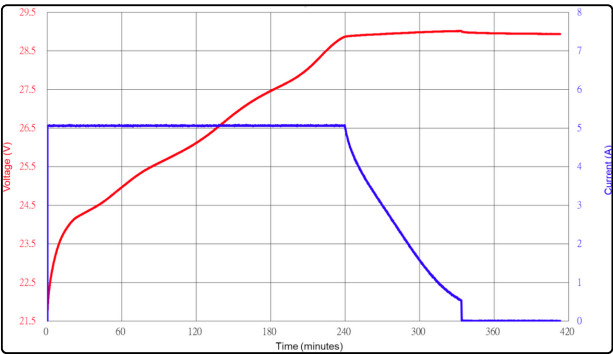
MECHANICAL DESIGN



Pin	Definition
1	Output+
2	NTC
3	Output -
4	Data

CHARGING CURVES

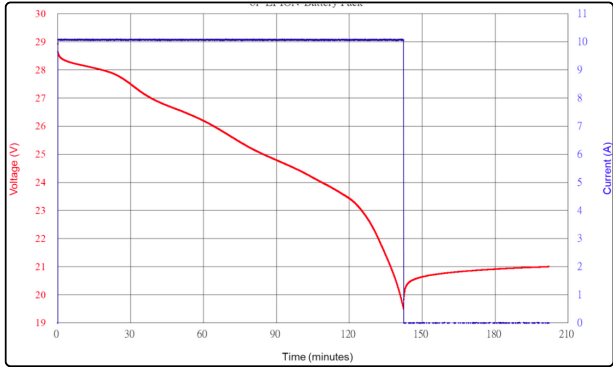
Charging profile: CC/CV mode, 29.05V charge voltage, 5A constant current, charge cutoff at 0.5A



Charge Current: 10A
Charge Time: 2.3 hrs

DISCHARGING CURVES

Constant current discharge at 10A until protection cutoff triggered by BMS



Discharge Current: 10A (1C)
Discharge Time: 2.3 hr
Temperature: 26.8°C increases to 39.1°C (12.3°C rise)