

## Sony US18650VTC5A 2600mAh (Green)

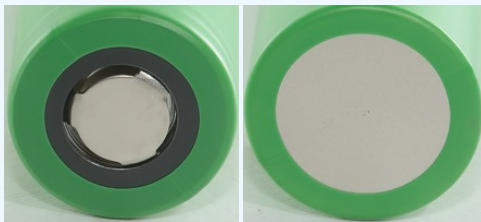


Official specifications:

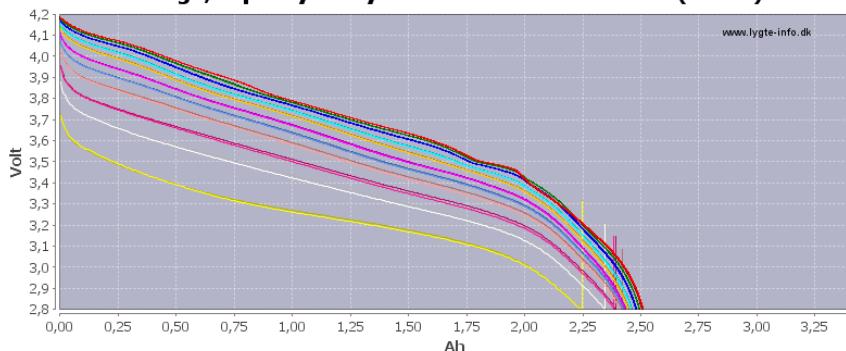
- Nominal capacity: 2600mAh
- Rated capacity: 2500mAh
- Maximum continuous discharge current: 35A with 80° cut-off
- Nominal voltage: 3.6V
- Internal impedance: 13.0mOhm typical at 1kHz
- Cycle performance: 300 cycles to 70% with 10A discharges.
- Standard charge current: 2.5A
- Maximum charge current: 6A
- Charge voltage: 4.2V +/-0.05V

Name		Sony US18650VTC5A 2600mAh (Green)				
Cell	Sony US18650VTC5A					
Supplier	eu.nkon.nl			Date:	10-2016	
Size	Weight:	47.9 g	Length:	65.0 mm	Diameter:	18.3 mm
Info	Top:	flat	Bottom:	metal	Rated A:	35
Test condition	Charge voltage:		4.2	Termination current:		0,03
Test current (A)	0,2	0,5	1	2	3	5
Measured capacity (Ah)	2,508	2,495	2,480	2,462	2,447	2,435
Measured energy (Wh)	9,211	9,152	9,071	8,944	8,840	8,703
PCB protection trip current (A)	NA					
Calculated internal resistance (ohm)	0,04					

A very high current cell with fairly high capacity.



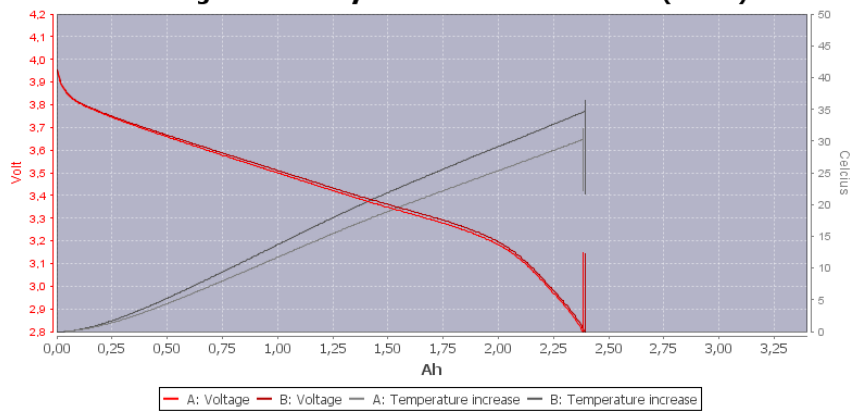
### Discharge, capacity: Sony US18650VTC5A 2600mAh (Green)



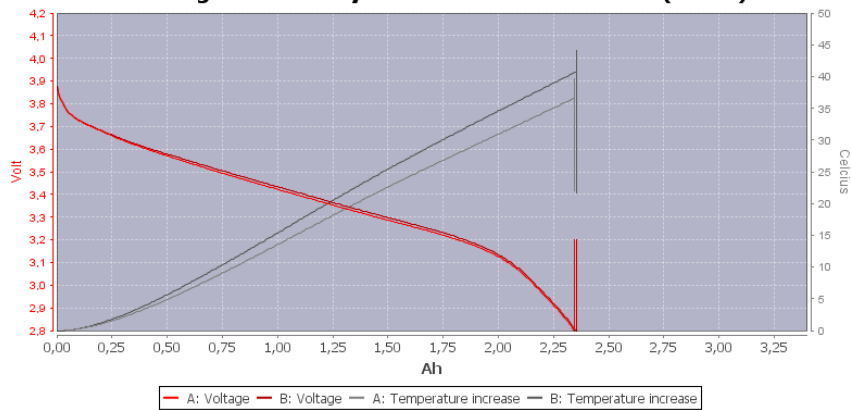
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A  
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

The discharge curves has very good tracking and the cell handles the 30A discharge nicely.

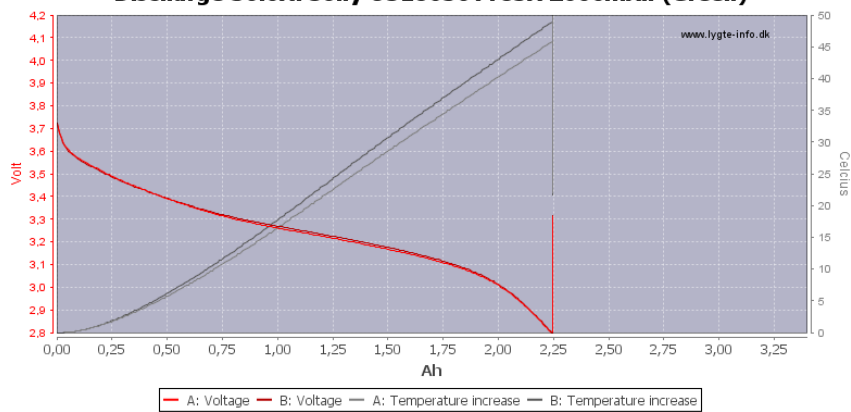
### Discharge 15.0A: Sony US18650VTC5A 2600mAh (Green)



### Discharge 20.0A: Sony US18650VTC5A 2600mAh (Green)

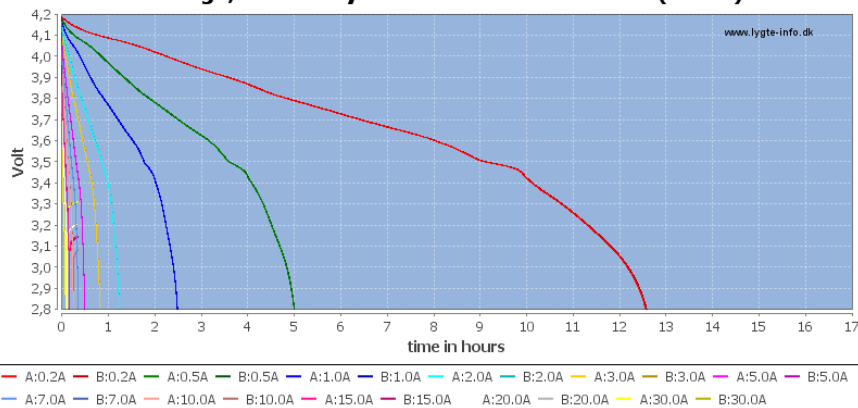


### Discharge 30.0A: Sony US18650VTC5A 2600mAh (Green)

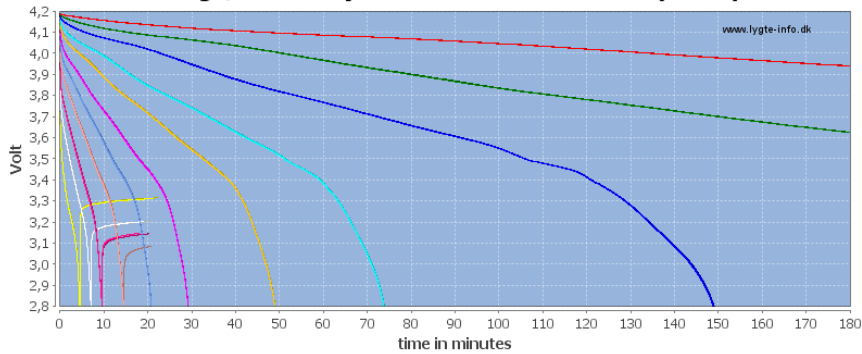


The cell was very close to the cut-off temperature at the end of the 30A discharge.

### Discharge, time: Sony US18650VTC5A 2600mAh (Green)

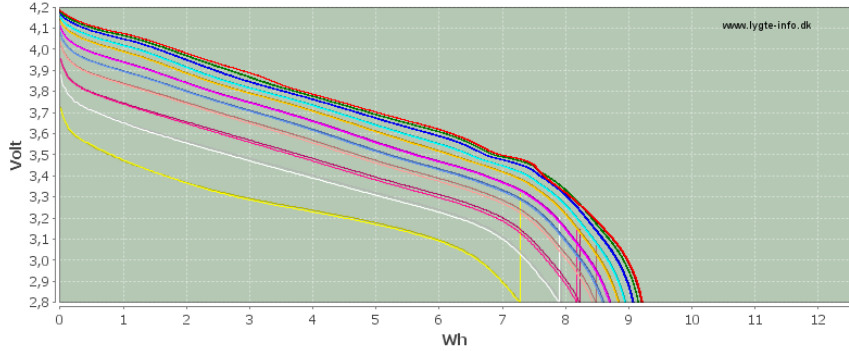


### Discharge, time: Sony US18650VTC5A 2600mAh (Green)



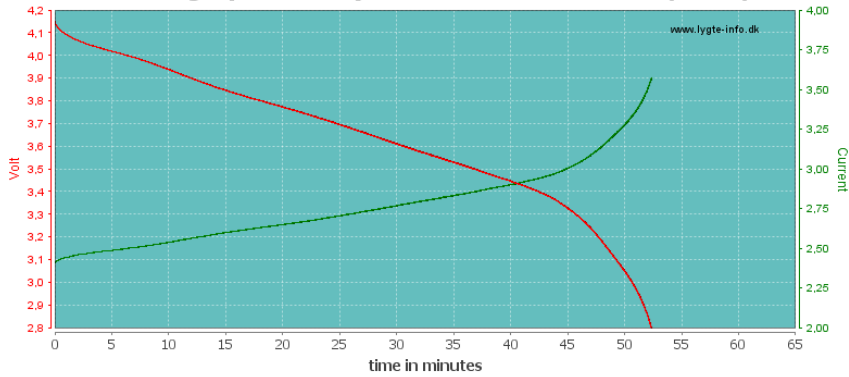
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A  
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

### Discharge, energy: Sony US18650VTC5A 2600mAh (Green)



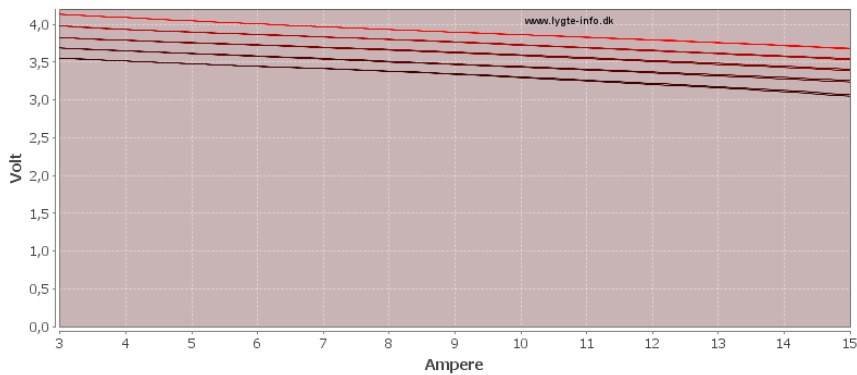
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A  
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

### Discharge, power: Sony US18650VTC5A 2600mAh (Green)



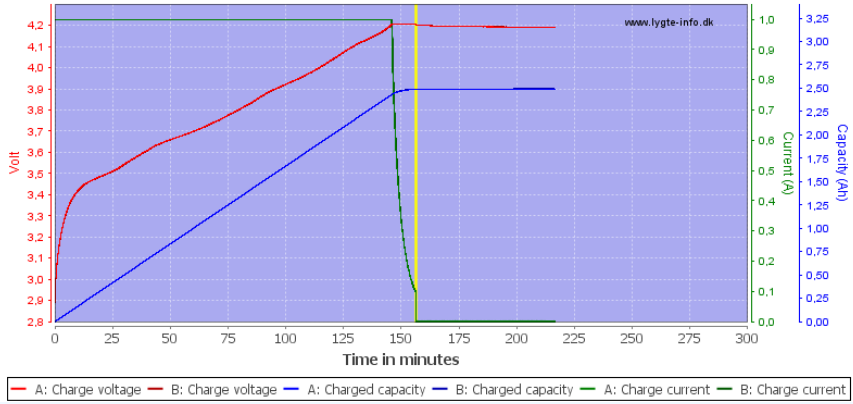
— A:10.0W voltage — B:10.0W voltage — A:10.0W current — B:10.0W current

### Protection test: Sony US18650VTC5A 2600mAh (Green)



— A:Test 1 — A:Test 2 — A:Test 3 — A:Test 4 — A:Test 5 — B:Test 1 — B:Test 2 — B:Test 3 — B:Test 4 — B:Test 5

## Charging: Sony US18650VTC5A 2600mAh (Green)



## Conclusion

The upgrade from VTC5 to VTC5A did not add more capacity to the cell, but the voltage is slightly higher when drawing current.

As usual the Sony cells are very good.

## Notes and links

- [How is the test done and how to read the charts](#)
- [How is a protected LiIon battery constructed](#)
- [More about button top and flat top batteries](#)
- [Compare to 18650 and other batteries](#)