

Samsung INR18650-25R 2500mAh (Green)



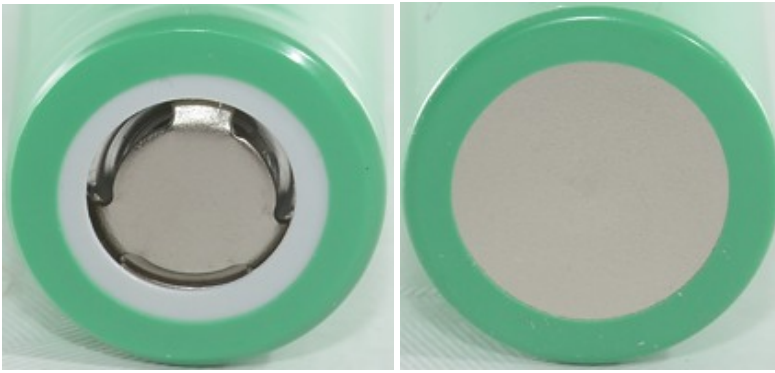
Official specifications:

- Nominal discharge capacity: 2,500mAh
- Nominal voltage: 3.6V
- Standard charge: CCCV, 1.25A, 4.20 ± 0.05 V, 100mA cut-off
- Rapid charge: CCCV, 4A, 4.20 ± 0.05 V, 100mA cut-off
- Charging time: Standard charge : 180min / 100mA cut-off
- Rapid charge: 60min (at 25°C) / 100mA cut-off
- Max. continuous discharge: 20A(at 25°C), 60% at 250 cycle
- Discharge cut-off voltage: 2.5V
- Cell weight: 45.0g max
- Cell dimension: Height : 64.85 ± 0.15mm, Diameter : 18.33 ± 0.07mm
- Operating temperature (surface temperature): Charge : 0 to 50°C (recommended recharge release < 45°C), Discharge: -20 to 75°C (recommended re-discharge release < 60°C)
- Storage temperature (Recovery 90% after storage): 1.5 year -30~25°C, 3 months -30~45°C, 1 month -30~60°C

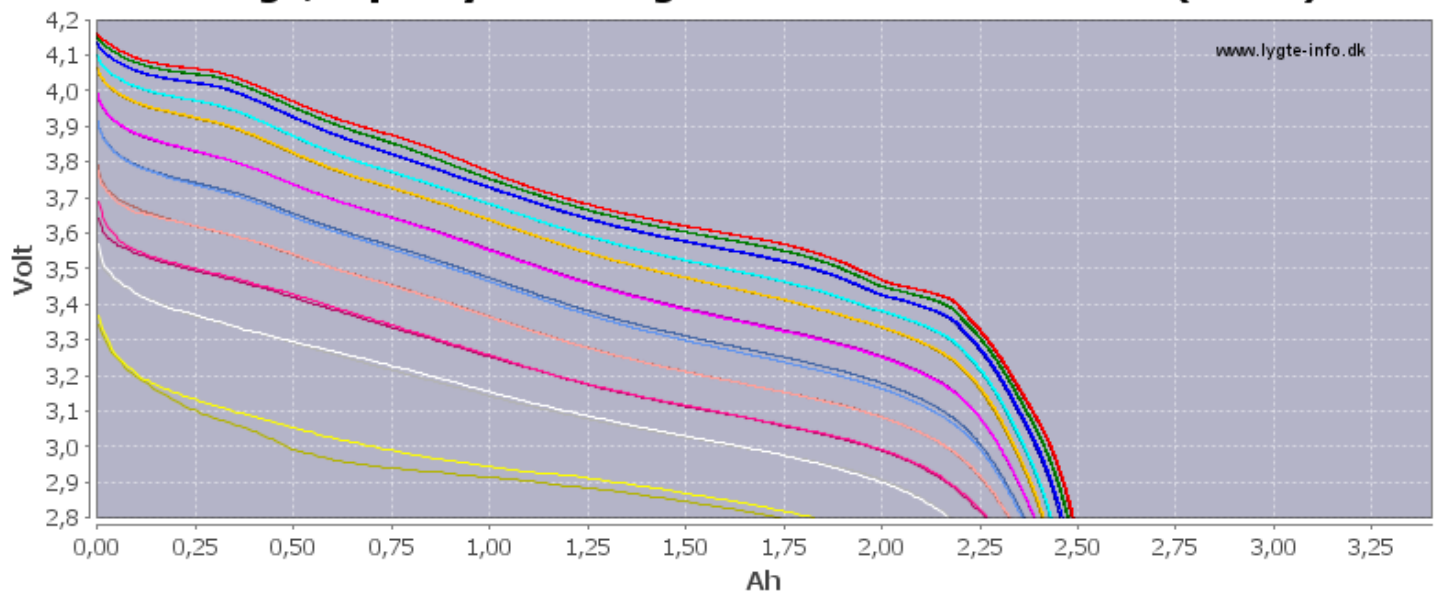
Name	Samsung INR18650-25R 2500mAh (Green)					
Cell	Samsung INR18650-25R 2500mAh					
Supplier	Akkuteile.de			Date:	1-2015	
Size	Weight:	43.8 g	Length:	64.9 mm	Diameter:	18.3 mm
Info	Top:	flat	Bottom:	metal	Rated A:	20
Test condition	Charge voltage:		4.2	Termination current:		0,1
Test current (A)	0,2	0,5	1	2	3	5
Measured capacity (Ah)	2,487	2,474	2,458	2,431	2,412	2,390
Measured energy (Wh)	9,176	9,096	8,982	8,778	8,608	8,342
PCB protection trip current (A)	NA					
Calculated internal resistance (ohm)	0,04					

This is the high capacity, high current cell from Samsung.





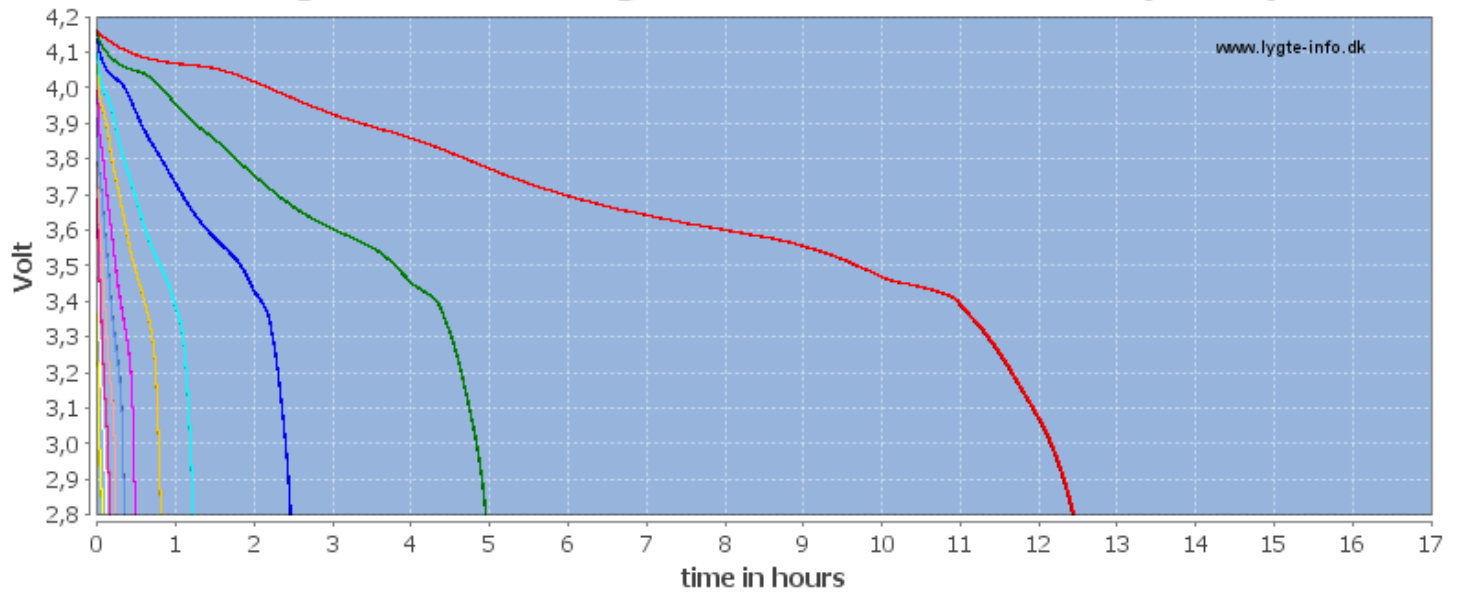
Discharge, capacity: Samsung INR18650-25R 2500mAh (Green)



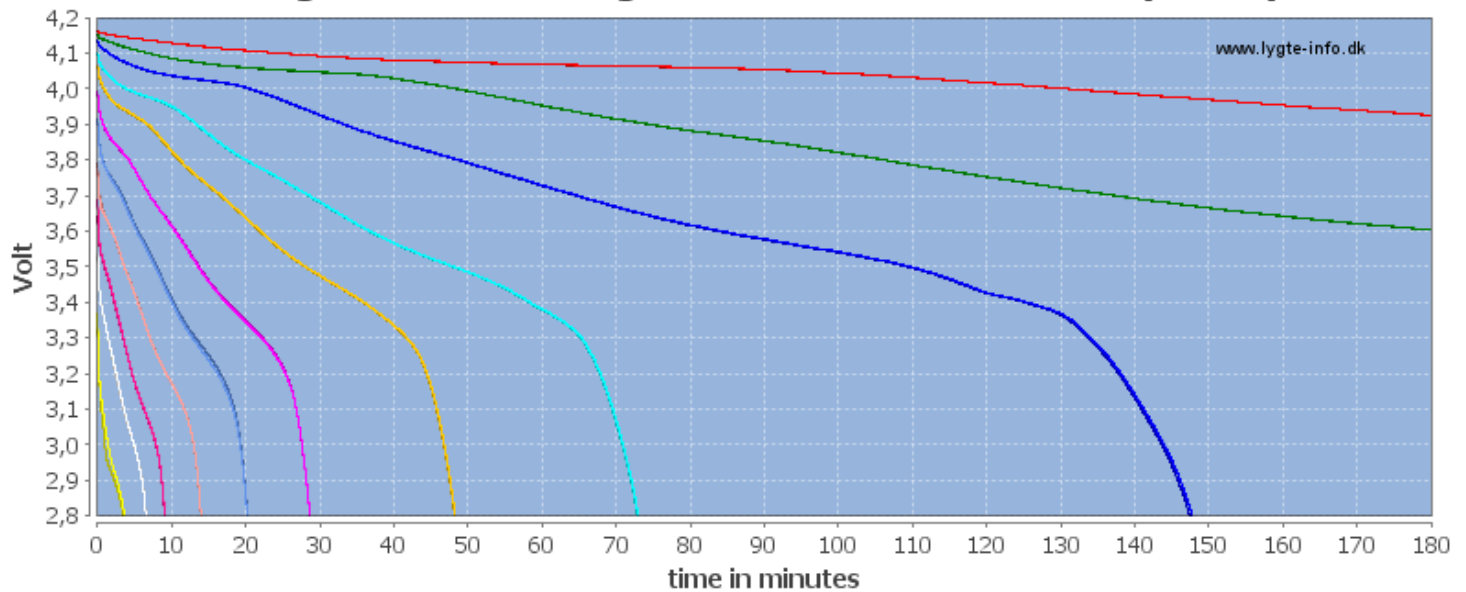
A:0.2A	B:0.2A	A:0.5A	B:0.5A	A:1.0A	B:1.0A	A:2.0A	B:2.0A	A:3.0A	B:3.0A	A:5.0A	B:5.0A
A:7.0A	B:7.0A	A:10.0A	B:10.0A	A:15.0A	B:15.0A	A:20.0A	B:20.0A	A:30.0A	B:30.0A		

There is good tracking between the two cells and the capacity does only drop slowly with load. The 30A discharge is to high for this battery.

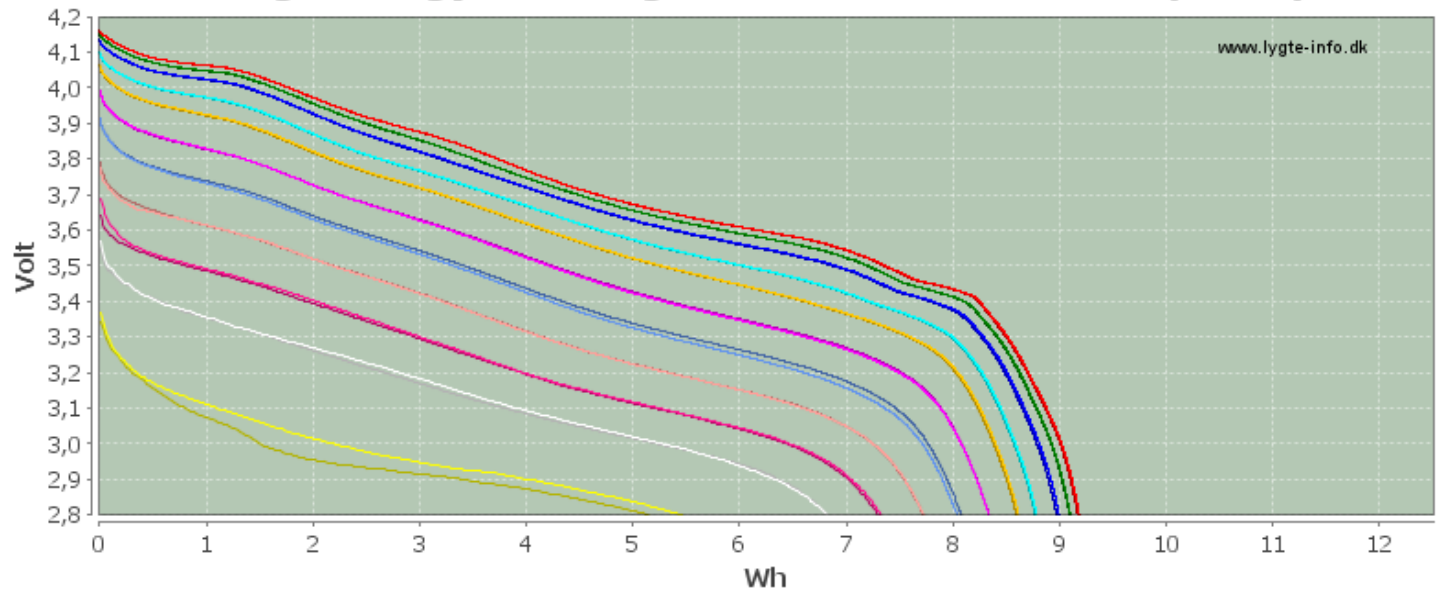
Discharge, time: Samsung INR18650-25R 2500mAh (Green)



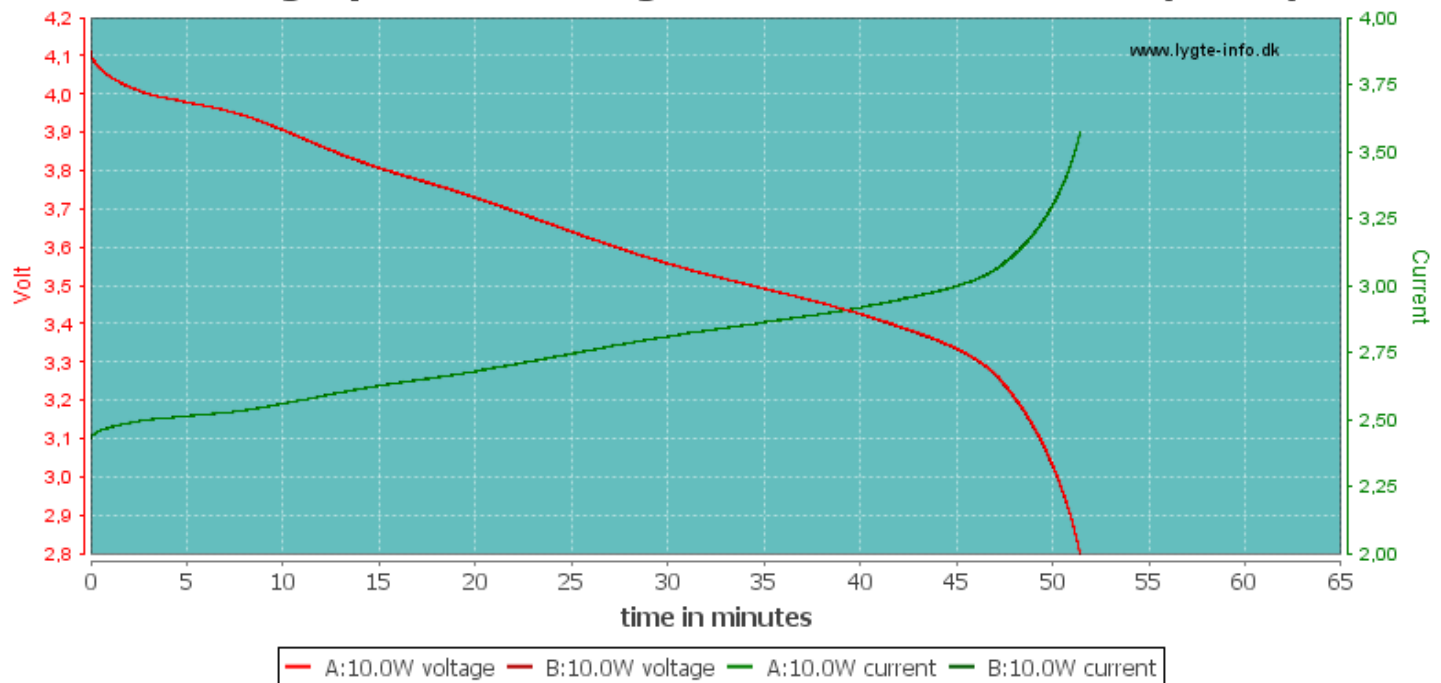
Discharge, time: Samsung INR18650-25R 2500mAh (Green)



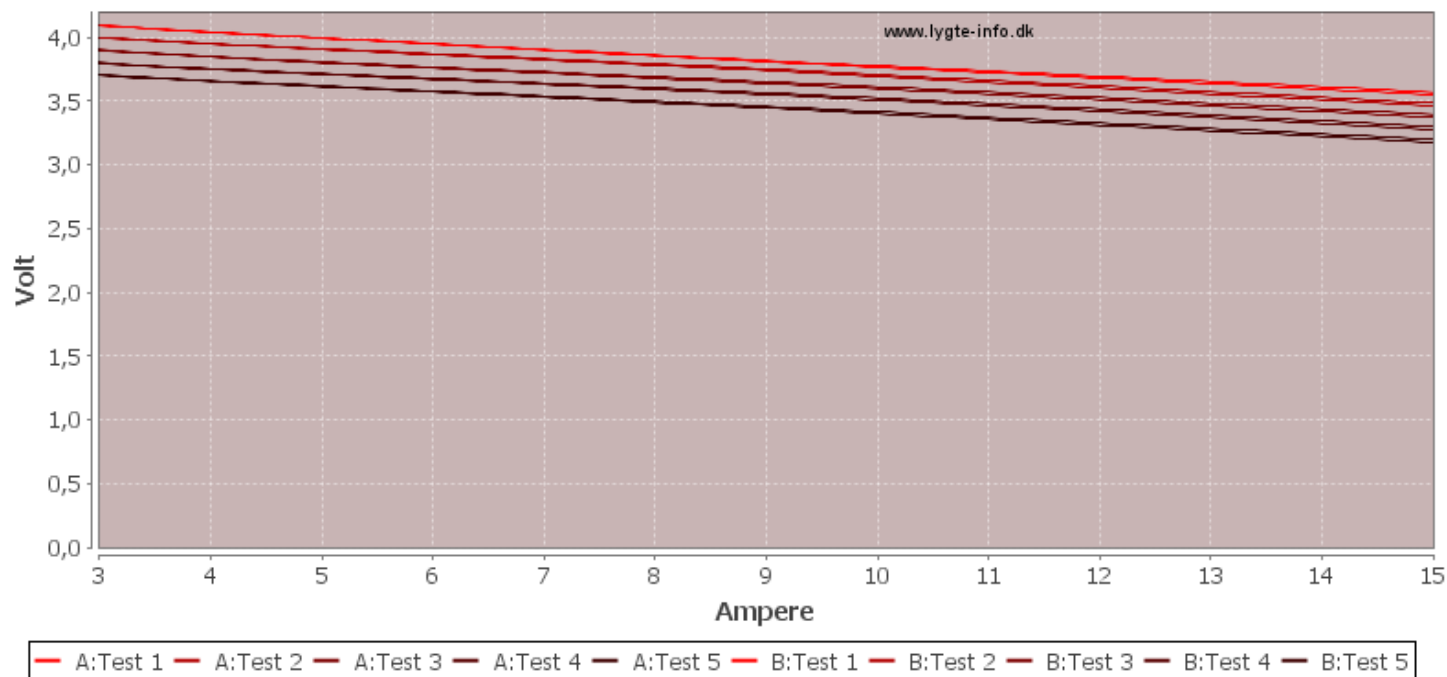
Discharge, energy: Samsung INR18650-25R 2500mAh (Green)



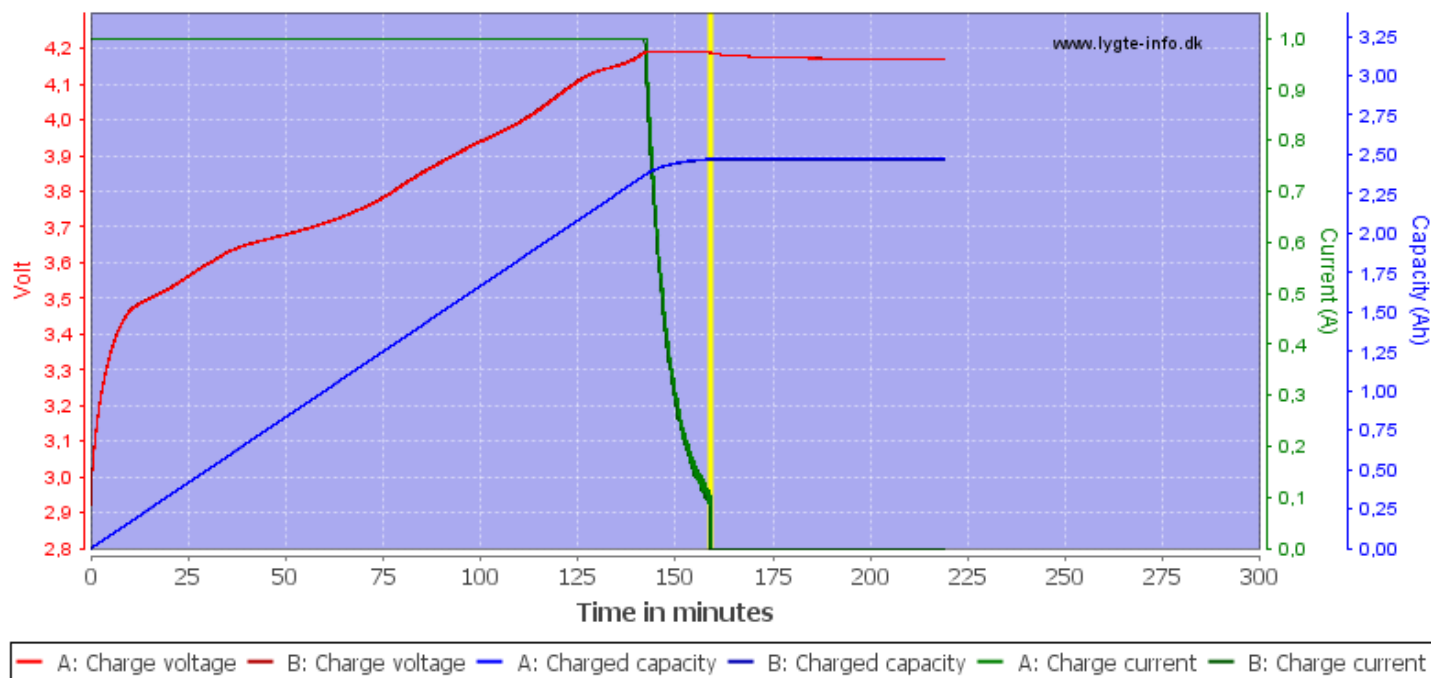
Discharge, power: Samsung INR18650-25R 2500mAh (Green)



Protection test: Samsung INR18650-25R 2500mAh (Green)



Charging: Samsung INR18650-25R 2500mAh (Green)



Conclusion

This is one of the good high current, high capacity batteries, it has good performance, but it is not the best of them.

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](#)

