



# SE-2054-1

REF SE20541NR29

## Key Features

- Tested & certified to redundant safety standards.
- Ready to fit in. No extra development cost.
- Smart battery system compliant to SBS v1.1
- SMBus v1.1 communication support.
- 5-Segment LED State of Charge (SoC) indicator.
- UL-94 V-0 rated ABS enclosure.
- Industry standard 5 pin connector.
- JEITA charging profile optimization.
- ESD protection up to 8kV
- SHA-1 cryptosystem to prevent plagiarism
- UL certified INR-18650 2.85Ah Lithium-Ion cells

## Description:

The SE20541NR29 is a 14.4V 2.85Ah (41.04Wh) Lithium ion smart battery which can be used in a numerous portable equipments. The battery comprises four 3.6V 2.85Ah INR-18650 cells in a 4-series, 1-parallel array and can deliver up to 3A of discharge current. The internal battery management system (BMS) is System Management Bus (SMBus) and Smart Battery System (SBS) compliant and can operate as part of a smart battery system along with a compatible smart charger and host device.

## Applications

- Medical
- Solar
- Wind
- Mobility
- Data Center
- Transport
- Sports
- Recreation
- Utility



Self Declaration:  
Conforming to  
IS16046: 2018  
R-91005673

## Rechargeable Li-ion Battery 14.4V 2.85Ah 41.04Wh

### Protection

- Over charge
- Over discharge
- Over current
- Over temperature
- Short-circuit
- Reverse polarity

### Approvals

- ISO 9001:2015
- IEC 62133 : 2017
- ISO 13485:2016
- CE
- UN 38.3
- BIS 16046:2018

### Technical Specification:-

Part number	SE20541NR29
Pack designation	4INR19/65-1
Brand	SES
Chemistry	Lithium Ion
Nominal Voltage	14.4 V
Nominal Capacity	2850 mAh
Nominal Energy	41.04 Wh
Discharge current Max.	3.0 A
Discharge power Max.	43.2 W
Charging Voltage Max.	16.8 V
Charging Current Max.	1.4 A
Charge indicator	5 Segment, LED
Communication	SMBus v1.1
Data System	SBS v1.1
Charge	-20°C to +55°C
Discharge	-20°C to +55°C
Storage	-20°C to +55°C
Storage Temperature	+20°C to +70°C
Other	
Dimension (L x W x H)	85.0 x 77.4 x 22.5 mm ± 0.5 mm
Weight (typical)	280 gm ± 20gm

Manufactured by : **SEALED ENERGY SYSTEMS**



Plot No. 72, HSIIDC Industrial Estate,  
Ambala Cantt -133006, Haryana, India



+91 171 2699 054  
+91 171 2698 389

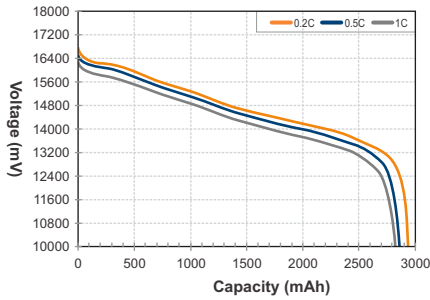


+91 171 2698 054  
+91 171 2699 221

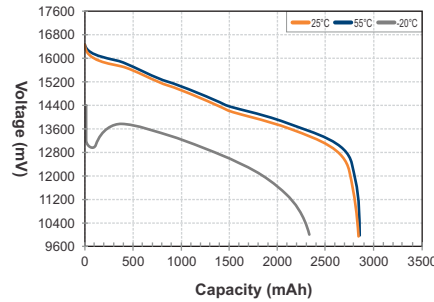


# Rechargeable Li-ion Battery 14.4V 2.85Ah 41.04Wh

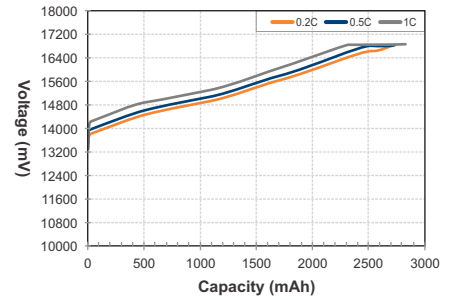
Rate discharge curve@ 25°C



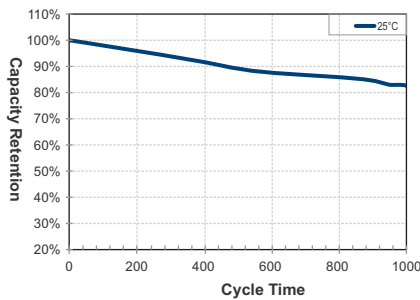
Discharge curve at different temperatures



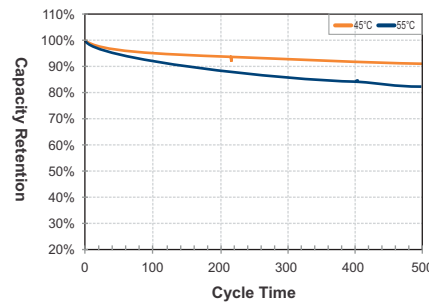
Rate charge curve@ 25°C



Cycle life curve@ 25°C



High temperature cycle life curves



### Chargers

SES® offers suitable chargers for batteries with a variety of capacities.

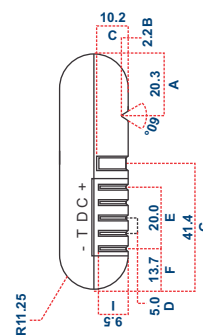
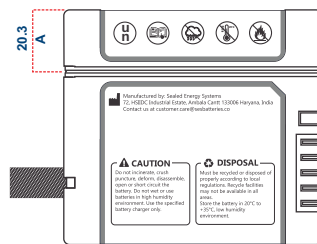
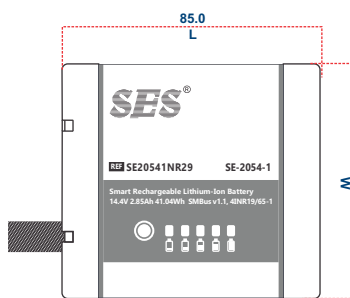
Refer to our website for more information on our switch mode type chargers.

Please contact our technical department for advice if you have difficulty in locating a suitable charger.

### Further Information

Please refer to our website [www.sesbatteries.co](http://www.sesbatteries.co) for a complete range of useful downloads, such as product catalogs, material safety data sheets (MSDS), ISO certification, etc.

### Product Dimension



Dimensions are in Millimeters	
Tolerances: ±0.5mm	
L : 85.0	W : 77.4
H : 22.5	A : 20.3
B : 2.2	C : 10.2
D : 5.0	E : 20.0
F : 13.7	G : 41.4
I : 9.5	



Self Declaration:  
Conforming to  
IS16046: 2018  
R-91005673

Manufactured by : **SEALED ENERGY SYSTEMS**

Plot No. 72, HSIIDC Industrial Estate, Ambala Cantt -133006, Haryana, India

+91 171 2699 054 +91 171 2698 054  
+91 171 2698 389 +91 171 2699 221