



**POWER STORAGE SOLUTIONS**  
 "Power is at the center of everything we do"

# SCLFP48150 5U

Lithium-ion battery system

- Increased energy density
- Ease of installation
- Longer life in uncontrolled environments
- Built-in battery control

## Product Standards

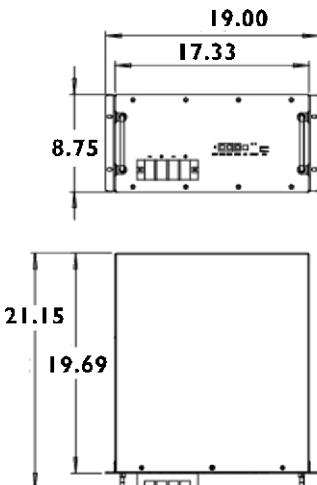
- IEC 60950
- IEC 62321
- IEC 62133
- UN 383
- UN 1642
- UN 1973

## MS Certification

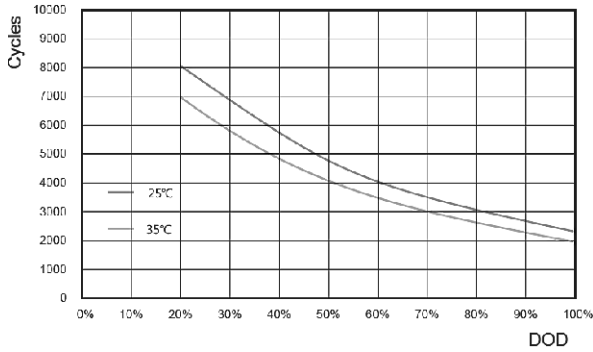
- ISO 9001
- ISO 14001
- OHSAS 18001

Nominal Characteristics		
Battery Model		SCIFP48150 5U
Nominal Voltage		48V
Typical Capacity		150Ah (25°C)
<b>Typical Energy</b>		<b>7200 Wh</b>
<b>Volumetric Energy Density</b>		<b>147.4 Wh/dm<sup>3</sup></b>
<b>Gravimetric Energy Density</b>		<b>106.2 Wh/kg</b>
Dimensions	Width	17.32 inches, 440mm
	Height	8.74 inches, 222mm
	Depth	19.69 inches, 500mm
Reference Weight		149.5 lbs. / 67.8 Kgs
Electrical Characteristics		
Voltage Window		40.5~ 54.0V
<b>Charge Voltage Range</b>		<b>52.5~ 54.0V</b>
<b>Max. Permanent Discharge Current</b>		<b>100A</b>
<b>Max. Permanent Charge Current</b>		<b>100A</b>
Faradic Charge Efficiency		99% (+20°C)
<b>Energy Charge Efficiency</b>		<b>94% (+20°C)</b>
Communication Interface (optional feature)		Modbus/SNMP/TACP
Operation Environment		
<b>Charge Temperature</b>		<b>0°C to +55°C</b>
<b>Discharge Temperature</b>		<b>-20°C to +60°C</b>
<b>Storage Temperature</b>		<b>-20°C to +60°C</b>
<b>Protection Class</b>		<b>IP20</b>

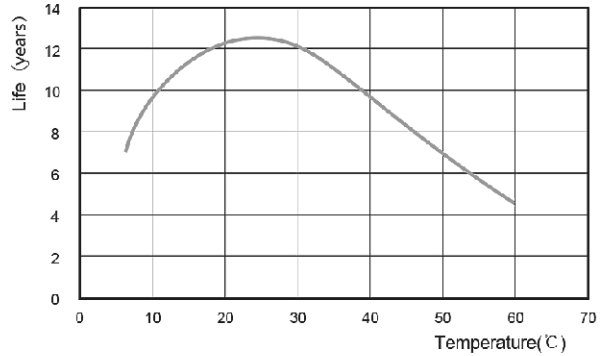
SCLF48150 5U is a powerful 48 Volt LiFePO4 battery model which has been specifically designed to provide battery backup for rack or cabinet telecom sites. It's modular design enables parallel installation to meet the needs of longer backup times. Can be used inside or outside plant applications.



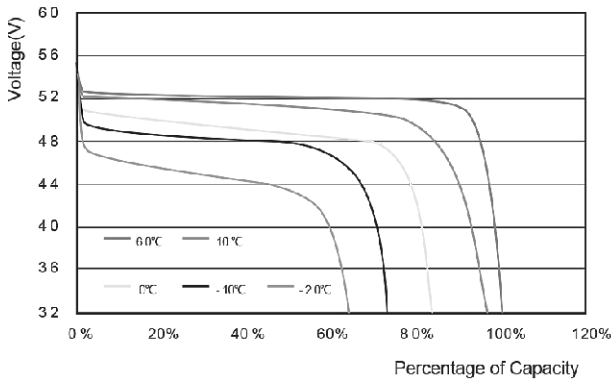
# Performance Curves



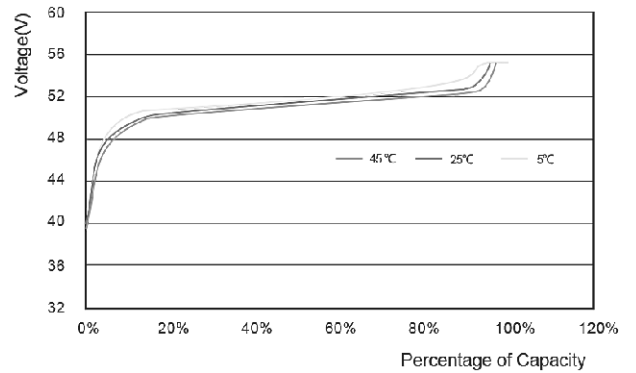
Cycle Life vs. Depth of Discharge (DOD)



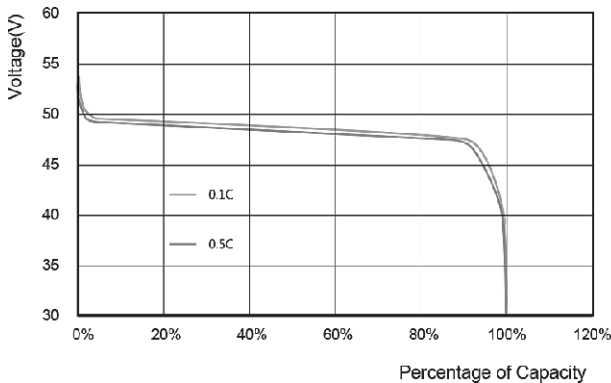
Calendar Life at Different Temperature



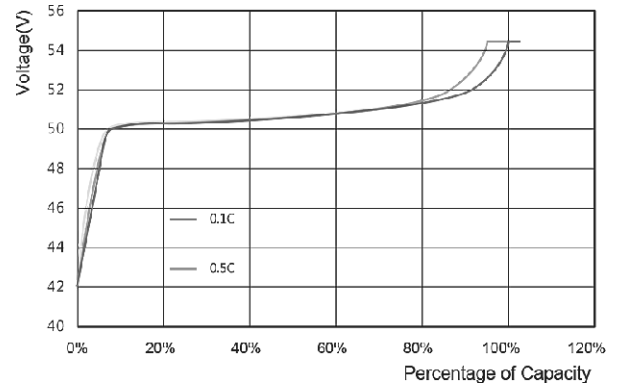
Discharge Curve at Different Temperature



Charge Curve at Different Temperature



Discharge Curve at Different Rate (25°C)



Charge Curve at Different Rate (25°C)

## Constant Current Discharge Data @ 25°C Hours

Current A	0.1C	0.2C	0.3C	0.4C	0.5C	0.6C
Voltage						
45.0	9.475	4.858	3.254	2.42	1.925	1.587
43.5	9.927	4.948	3.309	2.453	1.96	1.62
42.0	10.003	4.996	3.344	2.494	1.99	1.631
40.5	10.101	5.044	3.359	2.51	2.001	1.659