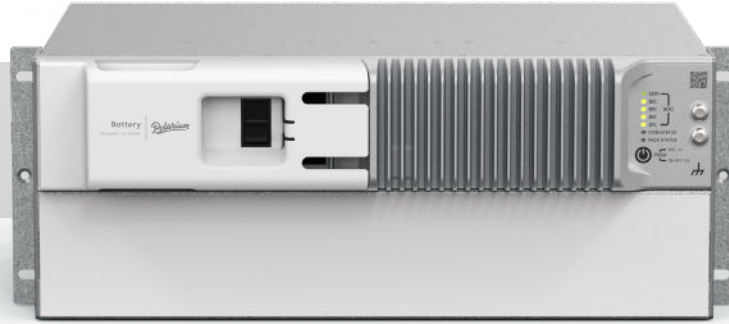




Battery 19" 4U / 150Ah

SLB48-150-146-5
15S Series, Generation 5



Polarium Battery is an advanced power backup system for telecom use. Its rechargeable smart lithium-ion battery provides reliable power backup for hybrid, off-grid and grid-connected telecom sites worldwide.

Safe

All our products are designed with your safety in mind - thoroughly verified and certified for safe operation.

Simple

Advanced technology made super easy to use. easy to install, maintenance free, charge control.

Strong

Works in all conditions and environments. Extra protection against dust and moisture for prolonged life.

Smart

Automatic balancing, automatic reconnect, remote monitoring options and much more.

Secure

Our unique, patented Anti-Theft Device disables function of batteries if removed from site. It's prepared for optional GPS tracker.

Sustainable

The lifetime is extraordinary long. It's small, light, maintenance free and can be remotely controlled.

DS1501465-Rev 1.1



Technical Specification

Enclosure Size	19" 4U
Lithium Chemistry	LFP
Rated Voltage	48 V
Rated Capacity Ah (0.2C, 25°C to 39 V)	150 Ah
Rated Energy Wh (0.2C, 25°C to 39 V)	7200 Wh
Calendar Life @ 80% SOC	15 years
Peak Discharge Power	6kW for 60 seconds
Discharge Cutoff Current	100 A
End-of-Discharge Voltage (LVBD)**	39 V
Charge Current Limitation (CLD)*	100 A
Charge Voltage for 100% SOC	54.75 V
Operating Temperature Charging	0 to +55°C (32 to 131°F)
Operating Temperature Discharging	-20 to +60°C (-4 to 140°F)
Operating Relative Humidity	According to ETSI 300 019-1-3 class 3.2 (0-95%)
Storage Temperature	-20 to +60°C (-4 to 140°F)
Weight	Approx. 74 Kg (163.1 lbs)
Dimensions mm (in")	W 440 D 577 H 173 (W 17.3" D 22.7" H 6.9")
Circuit breaker	100 A, BMS Controlled, single pole
IP class	IP20
Communication Protocols	RS485, RJ45 (2) ports, Modbus
Safety Standards	IEC62619, IEC62368, UN38.3
Management & Monitoring	Software for PC (Studio) included for full local monitoring and management. Remote connection via Modbus

*If the charge current is 100A or higher, the battery will automatically reduce the charge current to 6-12A temporarily

Data subject to change without notice

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Battery 19" 4U / 150Ah

SLB48-150-146-5
15S Series, Generation 5

Constant Current (A) @ 25°C
Duration (Hours)

End of Discharge Voltage	Constant Current (A) @ 25°C														
	1	2	3	4	5	6	7	8	9	10	12	14	16	20	24
50	N/A	58.9	40.6	30.9	24.9	20.9	18.0	15.8	14.0	12.7	10.6	9.1	8.0	6.4	5.3
48.5	N/A	62.9	42.9	32.5	26.1	21.8	18.8	16.4	14.6	13.2	11.0	9.4	8.3	6.6	5.5
47	N/A	66.3	44.8	33.8	27.1	22.7	19.5	17.0	15.1	13.6	11.4	9.8	8.5	6.8	5.7
45.5	N/A	69.0	46.4	34.9	28.0	23.3	20.0	17.5	15.6	14.0	11.7	10.0	8.8	7.0	5.9
44	N/A	71.0	47.5	35.7	28.6	23.8	20.4	17.9	15.9	14.3	11.9	10.2	8.9	7.1	6.0
42.5	N/A	72.1	48.2	36.2	29.0	24.1	20.7	18.1	16.1	14.5	12.0	10.3	9.0	7.2	6.0
41	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0
39.5	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0
38	N/A	72.4	48.4	36.3	29.1	24.2	20.8	18.2	16.1	14.5	12.1	10.4	9.1	7.3	6.0

Constant Power (W) @ 25°C
Duration (Hours)

End of Discharge Voltage	Constant Power (W) @ 25°C														
	1	2	3	4	5	6	7	8	9	10	12	14	16	20	24
50	N/A	2878	1986	1515	1224	1026	883	775	690	622	520	446	391	314	262
48.5	N/A	3061	2091	1587	1279	1070	920	806	718	646	540	463	406	325	271
47	N/A	3217	2181	1649	1325	1107	951	833	741	667	557	477	418	335	279
45.5	N/A	3341	2253	1699	1363	1138	976	855	760	684	570	489	428	342	285
44	N/A	3431	2305	1735	1390	1160	995	870	774	696	580	497	435	348	290
42.5	N/A	3482	2336	1756	1407	1173	1006	880	782	704	587	503	440	352	293
41	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294
39.5	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294
38	N/A	3494	2344	1763	1413	1178	1010	884	786	707	589	505	441	353	294

Energy / Wh @ 25°C
Duration (Hours)

End of Discharge Voltage	Energy / Wh @ 25°C					
	1	2	3	4	5	10
50	N/A	5757	5958	6059	6118	6219
48.5	N/A	6121	6274	6350	6393	6465
47	N/A	6433	6543	6597	6627	6674
45.5	N/A	6683	6759	6795	6815	6842
44	N/A	6862	6915	6939	6952	6965
42.5	N/A	6965	7007	7026	7035	7042
41	N/A	6987	7033	7053	7063	7070
39.5	N/A	6987	7033	7053	7063	7070
38	N/A	6987	7033	7053	7063	7070

State of Charge vs Voltage
Voltage (V)

State of Charge	State of Charge vs Voltage		
	0.2 C	0.5 C	1.0 C
100%	51.3	51.3	N/A
90%	49.5	48.9	N/A
80%	49.4	48.8	N/A
70%	49.2	48.6	N/A
60%	49.0	48.5	N/A
50%	48.9	48.4	N/A
40%	48.8	48.2	N/A
30%	48.5	48.0	N/A
20%	48.0	47.6	N/A
10%	47.4	46.9	N/A
0%	40.5	40.4	N/A

Technical Drawings

