



Outdoor Battery

SLB48-043-OUT-2
14S Series



Polarium Outdoor Batteries are designed to power communication equipment in tough outdoor conditions. Constructed to be easy to buy, install and operate, Polarium Outdoor Batteries require little to no maintenance for a trouble free operational life.

This 43 Ah unit is designed for back-up applications of 2000W, with the possibility to parallel up to 6 units for increased capacity.

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.

Sustainable

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

Technical Specification

Enclosure Type	Outdoor
Lithium Chemistry	NMC
Nominal Voltage	50.4 V
Rated Capacity Ah (0.2C, 25°C to 42 V)	43.3 Ah
Available Design Capacity @ Nominal Load 2kW*	31.1 Ah (47 min @ 2000 W)
Available Design Capacity @ Nominal Load 2.3kW*	22.8 Ah (30 min @ 2300 W)
Discharge Cut off Current	60 A
End-of-Discharge Voltage**	42 V
Charge Current Limitation (CLD)	6 A
Charge Voltage	56.5 V (+/-0.5V)
Normal Operating Ambient Temp. Range	-40°C to +60°C
Storage Temperature	-20°C to +45°C
Weight	22.8 kg
Dimensions (mm)	W 299 D 211 H 347
Fuse	60 A, FI=1.25
IP Class	IP65
Communication Protocol	Modbus
Being Certified to	IEC/UL 62368, UL1973, IEC 62619, UN38.3
Management & Monitoring	Studio PC Application (local), remote monitoring via Modbus

Data subject to change without notice

* Value stated for capacity @ beginning of life

** End of discharge voltage cut off at first measured 3.0V/cell

DS480430UT2 - Rev 1.0.1



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

All data applicable for battery charged at 56.5V

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	16.5	9.1	6.2	4.8	3.9	3.3	2.8	2.5	2.2	2.0	1.7	1.4	1.2	1.0	0.8
49	20.5	11.2	7.7	5.9	4.8	4.0	3.4	3.0	2.7	2.5	2.0	1.8	1.5	1.2	1.1
48	24.6	13.4	9.2	7.0	5.6	4.8	4.0	3.6	3.2	2.9	2.4	2.0	1.8	1.4	1.2
47	28.7	15.4	10.5	8.0	6.4	5.4	4.7	4.0	3.6	3.3	2.7	2.4	2.0	1.7	1.4
46	32.2	17.1	11.6	8.8	7.0	5.9	5.1	4.5	4.0	3.6	3.0	2.6	2.3	1.8	1.5
45	35.0	18.3	12.4	9.3	7.5	6.2	5.4	4.8	4.2	3.8	3.2	2.7	2.4	1.9	1.6
44	36.9	19.0	12.8	9.6	7.7	6.4	5.5	4.8	4.3	3.9	3.3	2.7	2.5	1.9	1.7
43	37.5	19.0	12.8	9.6	7.7	6.4	5.5	4.8	4.3	3.9	3.3	2.7	2.5	1.9	1.7
42	37.5	19.0	12.8	9.6	7.7	6.4	5.5	4.8	4.3	3.9	3.3	2.7	2.5	1.9	1.7

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	878	486	338	260	210	177	152	133	118	106	89	76	65	52	43
49	1072	591	409	314	254	213	184	161	144	129	107	92	80	64	53
48	1269	694	479	367	296	249	214	188	167	151	126	108	95	76	63
47	1455	789	544	415	335	281	242	213	189	171	143	123	107	86	71
46	1619	869	595	453	366	307	264	232	206	186	156	133	118	94	78
45	1747	925	631	479	386	323	278	244	218	196	164	141	124	99	83
44	1827	954	646	490	394	329	283	248	221	200	166	143	125	101	85
43	1853	954	646	490	394	329	283	248	221	200	166	143	125	101	85
42	1853	954	646	490	394	329	283	248	221	200	166	143	125	101	85

Energy (Wh) @ 25°C
Duration (Hours)

End of Discharge Voltage	Energy (Wh) @ 25°C					
	1	2	3	4	5	10
50	878	972	1014	1040	1050	1060
49	1072	1182	1227	1256	1270	1290
48	1269	1388	1437	1468	1480	1510
47	1455	1578	1632	1660	1675	1710
46	1619	1738	1785	1812	1830	1860
45	1747	1850	1893	1916	1930	1960
44	1827	1908	1938	1960	1970	2000
43	1853	1908	1938	1960	1970	2000
42	1853	1908	1938	1960	1970	2000

Capacity (Ah) @ 25°C
Duration (Hours)

End of Discharge Voltage	Capacity (Ah) @ 25°C					
	1	2	3	4	5	10
50	16.5	18.2	18.6	19.2	19.5	20.0
49	20.5	22.4	23.1	23.6	24.0	25.0
48	24.6	26.8	27.6	28.0	28.0	29.0
47	28.7	30.8	31.5	32.0	32.0	33.0
46	32.2	34.2	34.8	35.2	35.0	36.0
45	35.0	36.6	37.2	37.2	37.5	38.0
44	36.9	38.0	38.4	38.4	38.5	39.0
43	37.5	38.0	38.4	38.4	38.5	39.0
42	37.5	38.0	38.4	38.4	38.5	39.0

Technical Drawings

