

Vertiv U12V130L/A

Valve-regulated lead-acid battery | L Series high-reliability battery

Electrical and mechanical specifications

Parameter	Specification
Nominal voltage	12 V
Capacity at 10-hour rate	40 Ah at 1.80 V/cell, 25°C
15-minute constant-power rating	130 W/cell at 1.70 V/cell, 25°C
Approximate weight	12.9 kg
Terminal / tightening torque	M6 / 8-10 N·m
Dimensions: L / W / case H / total H (mm)	196 / 165 / 165 / 170
Case material	ABS
Design float life at 25°C	10 years
Cycle life	>300 cycles; 40% depth of discharge
Short-circuit current	1400 A
Maximum discharge current	630 A for 5 seconds
Approximate internal resistance, fully charged	8.5 mΩ

Charging, environment and applications

Operating parameters

Parameter	Specification
Operating temperature	-15 to 45°C
Recommended operating temperature	25 ±3°C
Float voltage	13.62 V
Equalization voltage	14.1 V
Maximum charging current	10 A
Temperature compensation	-3 mV/cell/°C
10-hour capacity at 40 / 25 / 0°C	102 / 100 / 85 %
Storage / refresh interval	6 months at 25°C; shorten the refresh interval above 25°C.
Self-discharge	<3% per month
Refresh charging	Option 1: 2.40 V/cell, current limit 0.25C, 12 h. Option 2: 2.35 V/cell, current limit 0.1C, 24 h.

Applications and source-listed standards

High-power UPS, emergency power systems, banking and commercial systems, medical equipment, automation control systems and data centers.

Standards listed in the supplied datasheet: GB/T 19638.1/2; IEC 60896-21/22; JIS C8704-2/1.

Discharge performance at 25°C

Constant-power discharge (W/cell)

End V/cell	5m	10m	15m	20m	30m	45m	1h	1.5h	2h	3h	5h	10h	20h
1.60	253.4	177.6	138.2	112.9	89.38	70.37	55.39	41.28	32.85	24.48	16.13	8.582	4.589
1.65	247.7	170.9	133.4	108.8	87.17	67.97	52.99	40.8	32.26	23.9	15.74	8.4	4.55
1.67	244.8	168.3	131.8	107	85.61	66.42	52.47	40.32	31.95	23.71	15.58	8.325	4.526
1.70	241	165.1	130	104.7	83.71	64.61	51.74	40.03	31.52	23.42	15.36	8.218	4.483
1.75	233.3	161.3	125.4	100.7	80.45	62.4	49.34	38.88	30.86	22.94	15.07	8.035	4.358
1.80	224.9	153.6	121	96.67	76.8	59.81	47.33	37.44	30.33	22.46	14.78	7.824	4.234

Constant-current discharge (A)

End V/cell	5m	10m	15m	20m	30m	45m	1h	1.5h	2h	3h	5h	10h	20h
1.60	138	90.72	70.27	55.06	42.97	33.6	26.11	20.52	15.84	11.04	7.066	4.2	2.27
1.65	133.1	87.65	67.29	52.52	41.03	32.26	25.14	19.68	15.26	10.68	6.998	4.15	2.23
1.67	131.7	86.77	66.07	51.62	40.4	31.74	24.72	19.39	14.98	10.53	6.969	4.13	2.209
1.70	129.8	85.54	64.6	50.51	39.61	31.1	24.19	19.03	14.69	10.34	6.912	4.1	2.18
1.75	124.9	81.98	62	48.34	37.97	29.62	22.91	18.05	14.11	9.994	6.854	4.05	2.14
1.80	117.3	78.4	59.39	46.63	36.7	28.13	21.64	17.28	13.44	9.619	6.682	4	2.1

Values are reproduced from the model-specific supplied datasheet. End voltage is per cell. C denotes nominal capacity in Ah; charge current expressed as C is in amperes. Design life is not a service-life guarantee.

Source and edition notes

Independently prepared English technical edition by IWELL, 22 October 2026. This is not an official Vertiv English publication. Specifications refer to the cited source revision; confirm the exact model and supplied configuration before selection.

Source: U12V130L-A-Supplied-Datasheet-ZH.pdf

Model-specific sheet, pages 1-2; the English edition includes all tabulated parameters and discharge data. Original dimensional drawings and characteristic curves remain available in the unchanged source PDF. The model sheet rates 130 W/cell at 1.70 V/cell and 10-year design life; the 2023 family table uses 1.67 V/cell and the family describes 12 years. These versions have not been merged.