

Vertiv VRLA batteries and IBMU

P, H and L Series selection tables | intelligent battery monitoring

Selection basis

All listed batteries are 12 V. Constant-power ratings are for 15 minutes at an end voltage of 1.67 V/cell; C10 capacity is specified at 25°C. Dimensions are maximum overall length x width x height. The family catalog and older model-specific sheets are separate revisions; confirm the exact battery drawing and discharge table for selection.

P Series features

Design float life up to 12 years. Three-dimensional grid and high-power active-material formulation support sustained high-rate discharge. Large copper-core lead terminals improve conductivity. Vent and sealing design reduces water loss. Low-calcium alloy improves grid density and corrosion resistance.

Model	V	15-min W/cell	C10 Ah	L x W x H (mm)	kg	Terminal	Torque N·m
U12V80P/B	12	80	18	181.5*77*166	5.75	M5	4-6
U12V90P/B	12	90	20	181.5*77*166	6.3	M5	4-6
U12V120P/B	12	120	38	197*165*170	11.6	M6	8-10
U12V160P/B	12	160	45	197*165*170	14.2	M6	8-10
U12V185P/B	12	185	55	229*138*211	16.5	M6	8-10
U12V210P/B	12	210	65	348*167*178	19.2	M6	8-10
U12V255P/B	12	255	70	348*167*178	21.6	M6	8-10
U12V300P/B	12	300	75	256*173*216	23.4	M8	12-16
U12V350P/B	12	350	85	293*173*216	26.8	M8	12-16
U12V360P/B	12	360	100	330*173*216	29.4	M8	12-16
U12V400P/B	12	400	100	330*173*216	30.2	M8	12-16
U12V425P/B	12	425	100	330*173*216	30.8	M8	12-16
U12V510P/B	12	510	150	480*170*238	43.2	M8	12-16
U12V600P/B	12	600	180	532*207*222	53.6	M8	12-16
U12V690P/B	12	690	200	522*240*224	62.2	M8	12-16
U12V765P/B	12	765	225	522*240*224	63.5	M8	12-16
U12V820P/B	12	820	250	522*268*226	72.5	M8	12-16

H Series | battery selection

H Series features

Design float life up to 10 years. Low-calcium/high-tin alloy and reinforced grids improve corrosion resistance. Radial grid, through-partition cell connections and copper-core terminals support high-current discharge with low resistance and heat generation. Consistent cells support sustained string discharge.

Model	V	15-min W/cell	C10 Ah	L x W x H (mm)	kg	Terminal	Torque N·m
U12V400H/C	12	400	102	348.5*174*222	33.0	M8	12-16
U12V455H/C	12	455	120	408*175*221	37.0	M8	12-16
U12V510H/C	12	510	135	483*170*240	42.0	M8	12-16
U12V570H/C	12	570	150	549*204*233	53.0	M8	12-16
U12V625H/C	12	625	160	549*204*233	55.0	M8	12-16
U12V680H/C	12	680	180	520*239*222	58.0	M8	12-16
U12V740H/C	12	740	205	520*239*222	62.0	M8	12-16
U12V795H/C	12	795	210	520*239*222	64.0	M8	12-16
U12V835H/C	12	835	220	549*259*233	75.0	M8	12-16

L Series | battery selection

L Series features

Design float life of 12 years at 20-25°C. Lead-calcium-tin grids resist corrosion and creep; 4BS nucleation and high-temperature/high-humidity curing support cycle life. Sensitive pressure valves, acid-mist filters and multiple terminal seals improve containment. High-performance separators improve oxygen recombination. Close plate spacing, tight assembly and carbon-based negative-plate technology support specific energy.

Model	V	15-min W/cell	C10 Ah	L x W x H (mm)	kg	Terminal	Torque N·m
U12V88L/A	12	88	24	175*164.5*127	8	M6	4-6
U12V130L/A	12	130	40	196*165*170	12.9	M6	8-10
U12V160L/A	12	160	45	196*165*170	14	M6	8-10
U12V205L/A	12	205	55	228*138*214	17.2	M6	8-10
U12V230L/A	12	230	65	350*167*179.5	22	M6	8-10
U12V235L/A	12	235	70	261*171*217	21.8	M6	8-10
U12V270L/A	12	270	75	261*171*217	24	M6	8-10
U12V280L/A	12	280	86	350*167*179.5	24.6	M6	8-10
U12VW330L/A	12	330	90	306*171*217	27	M6	8-10
U12V380L/A	12	380	100	330*174*225	30.3	M8	12-16
U12V440L/A	12	440	120	407*172*230.5	37.2	M8	12-16
U12V465L/A	12	465	135	345*172*278	42.4	M8	12-16
U12V515L/A	12	515	150	483*171*227	45.7	M8	12-16
U12V670L/A	12	670	200	522*234*225	62.5	M8	12-16
U12V745L/A	12	745	220	522*234*225	65.0	M8	12-16
U12V830L/A	12	830	250	534*271*233	77.2	M8	12-16

The catalog prints U12VW330L/A with an extra W; that exact printed model code is retained here and should be confirmed before ordering. Design float life is not a warranty or guaranteed installed service life.

IBMU | intelligent battery monitoring

Functions and features

Monitors block voltage, block temperature and internal resistance, string voltage, ambient temperature and charge/discharge current. Resistance accuracy $\pm 2\%$, voltage $\pm 0.3\%$, current $\pm 1\%$. Ring-network communication; local and remote data storage; low-power modules; reverse-polarity, short-circuit, overvoltage and overcurrent protection; local alarms; modular installation and online maintenance; trend displays and local LCD parameter setup.

System and controller

Parameter	Specification
Internal resistance range	0.1-100 m Ω
Interfaces / protocols	RS485, RS422, Ethernet / MODBUS, SNMP
Operating environment	-5 to 50°C; 5-90% RH; 80-110 kPa
BM-CM6S supply	85-264 VAC or 110-370 VDC
BM-CM6S-48 supply	36-72 VDC
Controller size / weight	≤ 180 D x 450 W x 44 H mm; ≤ 3 kg; standard 19-inch 1U
Controller mounting	Wall or rack

Block-monitoring modules

Parameter	Specification
Voltage ranges	BMC-12: 9-15 V; BMC-6: 4.5-8 V; BMC-2: 1.5-2.5 V
Voltage accuracy / battery temperature	$\pm 0.3\%$ / -10 to 75°C
Consumption / dimensions / weight	< 0.3 W / ≤ 25 D x 70 W x 85 H mm / ≤ 65 g

IBMU | current-monitoring modules

Current measurement

Parameter	Specification
Measurement range	BM-TC500: 0-500 A; BM-TC1000: 0-1000 A; BM-TC1500: 0-1500 A
Accuracy	±1%
Ambient temperature measurement range	-5 to 99°C
Dimensions / weight	≤25 D x 70 W x 85 H mm / ≤72 g
Mounting	On battery or battery-rack surface

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: Vertiv-Lead-Acid-Batteries-Catalog-ZH.pdf

Manufacturer source: <https://www.vertiv.com/globalassets/products/critical-power/uninterruptible-power-supplies-ups/acp-power-ups-chinese-brochure.pdf>

Source: 2023 family catalog, all technical sections and all 42 model rows. The source publication code contains a placeholder and is not used as a verified model or document identifier.