Hitachi Chemical

HITACHI

BATTERY

CSB

Product Manual

PRODUCT APPLICATION ▶

ALL series

Hitachi Chemical Energy Technology Co., Ltd.

BATTERY

CSB

As a world leading manufacturer of Valve Regulated Lead-Acid (VRLA) batteries, our products are utilized in over 100 countries in UPS, telecommunications, emergency lighting, security, electric vehicles, renewable system, etc.

In 2016, CSB battery co., Ltd. has been incorporated into Hitachi Chemical group, and changed company name as Hitachi Chemical Energy Technology Co., Ltd.

We will keep our original intention to supply reliable power solutions, and continuous working on wonders, building the future with all our clients in the world.

EVH series

- Characteristics: More than 400 cycles at 100% discharge cycle use
- Application: Specially designed for wheeled riding devices such electric vehicles, golf carts, portable machines, power tools, etc.
- Capacity Range: 15Ah to 39Ah of 12V battery (20hr-rate to 1.75V per cell @25℃ (77℉))

GP series

- Characteristics: The widest range of applications with a service life of up to 5 years in standby service.
- Application: CATV, telemeters, emergency lighting equipment, etc.
- Capacity Range: 4.5Ah to 100Ah of 6 or 12V battery(20hr-rate to 1.75V per cell @25℃ (77℉))

EVX series

- Characteristics: More than 400 cycles at 100% discharge cycle use
- Application: Specially designed for wheeled riding devices such electric vehicles, golf carts, portable lighting and measure equipment, camera, etc.
- Capacity Range: 7.2Ah to 75Ah of 12V battery (20hr-rate to 1.75V per cell @25℃ (77℉))

GPL series

- Characteristics: The widest range of applications with a service life of up to 8 ~ 10 years in standby service.
- Application: CATV, telemeters, communicaitons and electrical equipment, precision instrument backup power, etc.
- Capacity Range: 7.2Ah to 100Ah of 12V battery(20hr-rate to 1.75V per cell @25℃ (77℉))

HR series

- Characteristics: Specially design for high efficient discharge application with a service life of up to 5 years in standby service.
- Application: UPS, emergency lighting, fire alarm and security system, etc.
- Capacity Range: 18W/cell to 120W/cell of 12V battery(15 min-rate to 1.67V per cell@25℃ (77℉))

MSV series

- Characteristics: Very long service life battery with a service life of up to 15 years in standby service.
- Application: Emergency lighting, switching mode rectifier power supply, back-up power for testing and measuring equipment, etc.
- Capacity Range: 200Ah to 1000Ah of 2V battery(10hr-rate to 1.80V per cell@25℃ (77℉))

HRL series

- Characteristics: Specially design for high efficient discharge application with a service life of up to 8~10 years in standby service.
- Application: UPS, emergency lighting, fire alarm and security system, etc.
- Capacity Range: 10W/cell to 540W/cell of 6V or 12V(15 min-rate to 1.67V per cell@25℃ (77℉))

MU series

- Characteristics: large capacity battery with a service life of up to 20 years in standby service.
- Application: UPS, telecom system, emergency lighting, power plants and substations, etc.
- Capacity Range: 1000Ah to 1500Ah of 2V battery(10hr-rate to 1.80V per cell@25℃ (77℉))

MSJ series

- Characteristics: Very long service life battery with a service life of up to 20 years in standby service.
- Application: Emergency lighting, switching mode rectifier power supply, back-up power for testing and measuring equipment, etc.
- Capacity Range: 150Ah to 1000Ah of 2V battery(10hr-rate to 1.80V per cell @25℃ (77℉))

TPL series

- Characteristics: Series battery with front terminal access and space saving design that offer a service life of up to 12 years in standby service.
- Application: UPS, telecom applications (Distributed power, PHS, cellular and broadband), etc.
- Capacity Range: 80Ah to 150Ah of 12V battery (8hr-rate to 1.75V per purchase @25℃ (77℉))

UPS series

- Characteristics: the series battery uses the latest wafer-thin plate technology to provide optimum high-rate performance with a design life up to 5 years in standby service.
- Application: UPS, emergency lighting, fire alarm and security system, etc.
- Capacity Range: 240W/battery to 580W/battery of 12V battery (5min-rate to 9.60V per PCS@25℃ (77℉))

XPL series

- Characteristics: Extreme high rate with a service life of up to 12 years in standby service.
- Application: UPS, emergency lighting, fire alarm and security system, etc.
- Capacity Range: 2200W to 6700W of 12V battery (5 min-rate to 1.60V per PCS@25℃ (77℉))

XTV series

- Characteristics: Speically designs for extreme temperatures (-20℃ to 50℃) with a service life of up to 12 years in standby service.
- Application: UPS, emergency lighting, solar cell power generation, etc.
- Capacity Range: 7.2Ah to 110Ah of 12V battery (20hr-rate to 1.75V per cell@25℃ (77℉))

XHRL series

- Characteristics: Extreme high rate discharge and long life battery with a service life of up to 10 years in standby service.
- Application: UPS, emergency lighting, fire alarm and security system, etc.
- Capacity Range: 360W/cell to 620W/cell of12V battery(15 min-rate to 1.67V per cell@25℃ (77℉))

EVH Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
EVH12150 x3	12	15	4.60	10.5	--	180	101.8±1.5	97.5±1.0	151.0±2.0	98.0±1.0	F2	Faston Tab 250	4.50	--	--
EVH12240 x2	12	24	7.55	8.6	--	320	170.0±2.0	170.0±2.0	181.0±2.0	76.2±1.0	I1	M5	7.2	59/51	5.73
EVH12390	12	39	11.5	8.9	--	400	178.3±2.0	154.8±2.0	195.6±2.0	130.0±1.5	B5	M6	11.7	138.6/120.3	13.58

- * Nominal Capacity 20hr-rate to 1.75V per cell@25℃ (77℉)
- Charging voltage for cycle Use : 2.45±0.05/Cell AT 25℃ (77℉) Temp. Coefficient-5.0mV/℃

EVX Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length (L)	Width (W)				Kgf-cm/ lbf-in	N-m
EVX1272	12	7.2	2.55	23.9	--	100/130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F1/F2	Faston Tab 187/250	2.16	--	--
EVX12120	12	12	3.83	15.4	--	150/180	100.3±1.5	94.1±1.0	151.0±2.0	98.0±1.0	F1/F2	Faston Tab 187/250	3.60	--	--
EVX12170	12	17	5.67	13.3	--	230	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	B1/B3	M5	5.10	59/51	5.73
EVX12200	12	20	6.70	12.5	--	230	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	I1	M5	6.00	59/51	5.73
EVX12260	12	26	8.65	9.6	--	350	125.0±1.5	125.0±1.5	166.0±2.0	175.0±2.0	B1/B3/B3B I1	M5	7.80	59/51	5.73
EVX12300	12	30	10.40	7.9	--	400	175.0±2.0	175.0±2.0	166.0±2.0	125.0±1.5	I1	M5	9.00	59/51	5.73
EVX12340	12	34	10.77	9.2	--	400	178.3±2.0	154.8±2.0	195.6±2.0	130.0±1.5	B5	M6	10.20	138.6/120.3	13.58
EVX12400	12	40	13.20	8.2	--	400	170.4±2.0	170.4±2.0	197.0±2.0	165.0±2.0	B8/I2	M5/M6	12.00	59/138.6 51/120.3	5.73/13.58
EVX12520	12	52	18.30	5.2	--	500	219.3±2.5	201.3±2.5	248.0±2.5	138.4±1.5	B4	M6	15.60	138.6/120.3	13.58
EVX12650	12	65	22.20	4.6	--	500	174.9±2.0	174.9±2.0	349.4±2.5	166.0±2.0	B4/I2	M6	19.50	138.6/120.3	13.58
EVX12750	12	75	25.60	4.7	--	500	232.5±2.5	210.5±2.5	277.0±2.5	168.5±2.0	B6	M6	22.50	138.6/120.3	13.58

- * Nominal Capacity 20hr-rate to 1.75V per cell@25℃ (77℉)
- Charging voltage for cycle Use : 2.45±0.05/Cell AT 25℃ (77℉) Temp. Coefficient-5.0mV/℃

GP Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length (L)	Width (W)				Kgf-cm/ lbf-in	N-m
GP645	6	4.5	0.84	18.5	137	60/90	107.5±1.5	102.1±1.5	70.0±1.0	48.0±1.0	F1/F2	Faston Tab 187/250	1.35	--	--
GP672	6	8.4	1.22	12.3	259	100/130	100.7±1.5	94.5±1.0	151.0±2.0	34.0±1.0	F1/F2	Faston Tab 187/250	2.16	--	--
GP6120	6	12	1.85	8.90	427	150/180	100.5±1.5	94.3±1.0	151.0±2.0	50.0±1.0	F1/F2	Faston Tab 187/250	3.60	--	--
GP1245	12	4.5	1.66	37.7	160	60/90	107.7±1.5	102.3±1.5	92.8±1.0	69.9±1.0	F1/F2	Faston Tab 187/250	1.35	--	--
GP1272	12	8.0	2.20	23.0	276	100/130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F1/F2	Faston Tab 187/250	2.16	--	--
GP12120	12	12	3.67	16.7	378	150/180	100.3±1.5	94.1±1.0	151.0±2.0	98.0±1.0	F1/F2	Faston Tab 187/250	3.60	--	--
GP12170	12	17	5.50	14.0	532	230	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	B1/B3/B1B	M5	5.10	59/51	5.73
GP12200	12	20	6.40	13.6	614	230	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	I1	M5	6.00	59/51	5.73
GP12260	12	26	8.45	9.9	635	350	125.0±1.5	125.0±1.5	166.0±2.0	175.0±2.0	B1/B3/B3B I1	M5	7.80	59/51	5.73
GP12340	12	34	10.48	9.5	915	380	178.3±2.0	154.8±2.0	195.6±2.0	130.0±1.5	B5	M6	10.2	138.6/120.3	13.58
GP12400	12	40	12.63	8.5	1012	400	170.4±2.0	170.4±2.0	197.0±2.0	165.0±2.0	B8 I2	M5 M6	12.0	59/51 138.6/120.3	5.73 13.58
GP12650	12	65	20.00	5.8	1663	500	174.9±2.0	174.9±2.0	349.4±2.5	166.0±2.0	B4 I2	M6	19.5	138.6/120.3	13.58
GP121000	12	100	30.60	4.4	2323	800	216.9±2.5	213.9±2.5	343.0±2.5	170.0±2.0	I2	M6	30.0	138.6/120.3	13.58

- * Nominal Capacity 20hr-rate to 1.75V per cell @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length (L)	Width (W)				Kgf-cm/ lbf-in	N-m
GP1245 (12V16W)	12	16	1.34	29.8	168	60/90	106.1±1.5	101.7±1.5	90.0±1.0	70.0±1.0	F2	Faston Tab 187/250	1.6	--	--
GP1272 (12V28W)	12	28	2.10	19.8	304	100/130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F1/F2	Faston Tab 187/250	2.8	--	--

- * Nominal Capacity 15 min-rate to 1.67V per cell @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

GPL Series

Battery Type	Nominal Voltage(V)	Nominal Capacity (Ah)*	Weight (Approx. kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max. Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charging Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm /lbf-in	N-m
GPL1272	12	7.2	2.60	22.0	265	100/130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F1/F2	Faston Tab 187/250	2.16	--	--
GPL12120	12	12	4.10	13.2	458	150/180	100.3±1.5	94.1±1.0	151.0±2.0	98.0±1.0	F1/F2	Faston Tab 187/250	3.60	--	--
GPL12260	12	26	8.30	9.60	662	350	125.0±1.5	125.0±1.5	166.0±2.0	175.0±2.0	B1/B3/B3B I1	M5	7.80	59.0/51.0	5.73
GPL12400	12	40	14.50	6.40	1186 1182	400	170.4±2.0	170.4±2.0	197.0±2.0	165.0±2.0	B8 I2	M5 M6	12.0	59.0/51.0 138.6/120.3	5.73 13.58
GPL12520	12	52	17.20	5.30	1485	500	206.3±2.5	201.3±2.5	228.0±2.5	138.4±1.5	I2	M6	15.6	138.6/120.3	13.58
GPL12750	12	80	25.60	4.00	1963	800	213.5±2.5	210.5±2.5	261.0±2.5	168.5±2.0	I2	M6	22.5	138.6/120.3	13.58
GPL12880	12	94	29.70	3.60	2098	800	213.6±2.5	210.6±2.5	308.7±2.5	169.0±2.0	I2	M6	26.4	138.6/120.3	13.58
GPL121000	12	100	33.50	3.20	2606	800	216.9±2.5	213.9±2.5	343.0±2.5	170.0±2.0	I2	M6	30.0	138.6/120.3	13.58

- * Nominal Capacity 20hr-rate to 1.75V per cell @25℃ (77℉)
- Float Charge: 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/ Cell℃

HR Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (W/cell)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
HR1218W	12	18	1.53	28.5	--	130	98.6±1.0	94.3±1.0	150.9±2.0	51.0±1.0	F1/F2	Faston Tab 250	1.8	--	--
HR1221W	12	21	1.80	23.0	249	60/90	106.1±1.5	101.7±1.5	90.0±1.0	70.0±1.0	F1/F2	Faston Tab 187/250	2.1	--	--
HR1224W	12	24	1.95	20.6	260	100/130	97.9±1.0	94.3±1.0	151.0±2.0	51.0±1.0	F1/F2	Faston Tab 187/250	2.4	--	--
HR1225W	12	24.5	1.84	24.7	--	130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F2	Faston Tab 250	2.5	--	--
HR1227W	12	27	1.97	19.9	424	100/130	106.1±1.5	101.8±1.5	90.0±1.0	70.0±1.0	F1/F2	Faston Tab 187/250	2.7	--	--
HR1234W	12	34	2.50	19.0	349	130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F2	Faston Tab 250	3.4	--	--
HR1251W	12	51	3.85	13.6	462	180	100.3±1.5	94.1±1.0	151.0±2.0	98.0±1.0	F2	Faston Tab 250	5.1	--	--
HR1290W	12	90	6.80	9.90	--	300	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	I1	M5	9.0	59/51	5.73
HR12120W	12	120	10.20	8.20	928	225	175.0±2.0	175.0±2.0	166.0±2.0	125.0±1.5	I1	M5	12	59/51	5.73

- * Nominal Capacity 15 min-rate to 1.67V per cell @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

HRL Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (W/cell)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
HRL634W	6	34	1.32	8.30	380	130	98.6±1.5	94.3±1.0	150.9±2.0	34.0±1.0	F2	Faston Tab 250	3.4	--	--
HRL1210W	12	10	1.10	32.10	120	40	70.5±1.0	64.3±1.0	178.0±2.0	34.0±1.0	F2	Faston Tab 250	1.0	--	--
HRL1223W	12	23	2.10	19.90	227	130	106.1±1.5	101.8±1.5	90.0±1.0	70.0±1.0	F2	Faston Tab 250	2.3	--	--
HRL1225W	12	25	1.95	19.00	328	130	106.1±1.5	101.8±1.5	90.0±1.0	70.0±1.0	F2	Faston Tab 250	2.5	--	--
HRL1234W	12	34	2.70	17.0	367	130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F2	Faston Tab 250	3.4	--	--
HRL1280W	12	80	6.80	9.40	776	300	167.0±2.0	167.0±2.0	181.0±2.0	76.2±1.0	I1	M5	8.0	59.0/51.0	5.73
HRL12110W	12	110	9.90	8.10	884	225	175.0±2.0	175.0±2.0	166.0±2.0	125.0±1.5	I1	M5	11.0	59.0/51.0	5.73
HRL12150W	12	155	11.75	7.30	1116	225	172.0±2.0	172.0±2.0	195.6±2.0	130.0±1.5	I2	M6	15.0	138.6/120.3	13.58
HRL12200W	12	215	17.30	5.50	1509	400	206.3±2.5	201.3±2.5	228.0±2.5	138.4±1.5	I2	M6	20.0	138.6/120.3	13.58
HRL12280W	12	280	25.80	3.50	2576	800	213.5±2.5	210.5±2.5	261.0±2.5	168.5±2.0	I2	M6	28.0	138.6/120.3	13.58
HRL12330W	12	350	29.60	3.50	2386	800	213.6±2.5	210.6±2.5	308.7±2.5	169.0±2.0	I2	M6	33.0	138.6/120.3	13.58
HRL12390W	12	410	33.00	3.00	2779	800	216.9±2.5	213.9±2.5	343.0±2.5	170.0±2.0	I2	M6	39.0	138.6/120.3	13.58
HRL12540W	12	540	43.90	2.60	3523	800	275.7±2.5	273.2±2.5	343.0±2.5	170.0±2.0	I2	M6	54.0	138.6/120.3	13.58

- * Nominal Capacity 15 min-rate to 1.67V per cell @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

MSJ Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Depth (D)	Width (W)				Kgf-cm/ lbf-in	N-m
MSJ150	2	155	12.80	0.54	2848	900	339.0±2.5	331.0±2.5	170.0±2.0	106.0±1.5	I4	M8	45	414/359	40.57
MSJ200	2	205	15.00	0.42	3930	1200	339.0±2.5	331.0±2.5	170.0±2.0	106.0±1.5	I4	M8	60	414/359	40.57
MSJ260	2	260	18.70	0.36	4872	1560	339.0±2.5	331.0±2.5	170.0±2.0	131.0±1.5	I4	M8	78	414/359	40.57
MSJ300	2	305	21.80	0.33	5075	1800	339.0±2.5	331.0±2.5	170.0±2.0	150.0±1.5	I4	M8	90	414/359	40.57
MSJ400	2	439	28.60	0.30	6065	2400	339.0±2.5	331.0±2.5	197.0±2.0	170.0±2.0	I4	M8	120	414/359	40.57
MSJ500	2	510	36.50	0.28	9953	3000	339.0±2.5	331.0±2.5	241.0±2.5	171.0±2.0	I4	M8	150	414/359	40.57
MSJ650	2	660	46.60	0.26	13235	3900	339.0±2.5	331.0±2.5	307.0±2.5	171.0±2.0	I4	M8	195	414/359	40.57
MSJ800	2	870	56.70	0.25	--	4800	339.0±2.5	331.0±2.5	373.0±2.5	174.0±2.0	I4	M8	240	414/359	40.57
MSJ1000	2	1020	72.80	0.28	--	6000	339.0±2.5	331.0±2.5	471.0±2.5	171.0±2.0	I4	M8	300	414/359	40.57

- * Nominal Capacity 10hr-rate to 1.80V per cell@25℃ (77℉)
- Charging voltage for standby Use : 2.23±0.02 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

MSV Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Depth (D)	Width (W)				Kgf-cm/ lbf-in	N-m
MSV200	2	200	13.60	0.59	2968	1200	339.0±2.5	331.0±2.5	170.0±2.0	106.0±1.5	I4	M8	60	414/359	40.57
MSV300	2	300	18.20	0.54	3600	1800	339.0±2.5	331.0±2.5	170.0±2.0	150.0±1.5	I4	M8	90	414/359	40.57
MSV400	2	415	24.90	0.43	7258	2400	339.0±2.5	331.0±2.5	197.0±2.0	170.0±2.0	I4	M8	120	414/359	40.57
MSV500	2	500	31.20	0.39	--	3000	339.0±2.5	331.0±2.5	241.0±2.5	171.0±2.0	I4	M8	150	414/359	40.57
MSV650	2	650	41.40	0.38	--	3900	339.0±2.5	331.0±2.5	307.0±2.5	171.0±2.0	I4	M8	195	414/359	40.57
MSV800	2	800	50.60	0.38	--	4800	339.0±2.5	331.0±2.5	373.0±2.5	174.0±2.0	I4	M8	240	414/359	40.57
MSV1000	2	1000	64.40	0.38	--	6000	339.0±2.5	331.0±2.5	471.0±2.5	171.0±2.0	I4	M8	300	414/359	40.57

- * Nominal Capacity 10hr-rate to 1.80V per cell@25℃ (77℉)
- Charging voltage for standby Use : 2.23±0.02 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

MU Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)			Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Length(L)	Width (W)	Depth(D)				Kgf-cm/ lbf-in	N-m
MU1000S	2	1000	62.10	0.31	--	6000	303.0±3.0	172.0±3.0	497.0±3.0	I3	M10	300	612/531	60.0
MU1500S	2	1500	91.50	0.31	--	9000	437.0±3.0	172.0±3.0	497.0±3.0	I3	M10	450	612/531	60.0

- * Nominal Capacity 10hr-rate to 1.80V per cell@25℃ (77℉)
- Charging voltage for standby Use : 2.23±0.02 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

TPL Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)			Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
TPL12800	12	80	38.30	3.70	2216	800	255.5±2.5	511.6±2.5	110.0±1.5	I2	M6	24.0	138.6/120.3	13.58
TPL12900	12	90	38.30	3.70	2216	800	255.5±2.5	511.6±2.5	110.0±1.5	I2	M6	27.0	138.6/120.3	13.58
TPL121000	12	100	38.30	3.70	2216	800	255.5±2.5	511.6±2.5	110.0±1.5	I2	M6	30.0	138.6/120.3	13.58
TPL121000T	12	100	34.80	4.00	2132	800	280.0±2.5	390.0±2.5	105.0±1.5	I2	M6	30.0	138.6/120.3	13.58
TPL121250A	12	125	44.70	4.50	2327	800	320.3±2.5	547.0±2.5	124.8±1.5	I2	M6	37.5	138.6/120.3	13.58
TPL121350A	12	135	54.80	3.70	2593	800	320.3±2.5	547.0±2.5	124.8±1.5	I2	M6	40.5	138.6/120.3	13.58
TPL121500A	12	159	54.80	3.70	2593	800	320.3±2.5	547.0±2.5	124.8±1.5	I2	M6	45.0	138.6/120.3	13.58

- Nominal Capacity 8hr-rate to 1.75V per cell@25℃ (77℉)
- Float Charge: 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

UPS Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (W/PCS)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
UPS122406	12	240	1.46	33.50	230	100/130	98.6±1.0	94.3±1.0	150.9±2.0	51.0±1.0	F1/F2	Faston Tab 187/250	2.0	--	--
UPS123606	12	360	1.97	20.70	325	100/130	98.6±1.0	94.3±1.0	150.9±2.0	51.0±1.0	F1/F2	Faston Tab 187/250	3.0	--	--
UPS123607	12	360	2.00	20.90	325	100/130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F1/F2	Faston Tab 187/250	3.0	--	--
UPS12460	12	460	2.50	16.60	450	130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F2	Faston Tab 187/250	3.8	--	--
UPS12580	12	580	2.83	11.80	575	130	98.6±1.0	94.3±1.0	150.9±2.0	64.8±1.0	F2	Faston Tab 187/250	4.8	--	--

- * Nominal Capacity 5 min-rate to 9.6V per PCS @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

XTV Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)				Kgf-cm/ lbf-in	N-m
XTV1272	12	7.2	2.57	20.40	305	130	102.0±1.5	94.3±1.0	150.9±2.0	64.8.0±1.0	F2	Faston Tab 250	2.16	--	--
XTV12550	12	55	17.90	5.20	1627	300	206.3±2.5	201.3±2.5	228.0±2.5	138.4±1.5	I2	M6	16.5	138.6/120.3	13.58
XTV12800	12	80	25.50	4.70	1917	800	213.5±2.5	210.5±2.5	261.0±2.5	168.5±2.0	I2	M6	24.0	138.6/120.3	13.58
XTV121000	12	100	30.20	4.10	2258	800	213.6±2.5	210.6±2.5	308.7±2.5	169.0±2.0	I2	M6	30.0	138.6/120.3	13.58
XTV121100	12	110	34.20	3.60	2648	800	216.9±2.5	213.9±2.5	343.0±2.5	170.0±2.0	I2	M6	33.0	138.6/120.3	13.58

- *Nominal Capacity 20hr-rate to 1.75V per cell@25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

XPL Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (W/PCS)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length (L)	Width (W)				Kgf-cm/ lbf-in	N-m
XPL2200	12	2200	17.3	6.0	-	400	206.3±2.5	201.3±2.5	228±2.5	138.4±1.5	I2	M6	18.3	138.6/120.3	13.58
XPL2700	12	2700	18.0	4.7	-	400	206.3±2.5	201.3±2.5	228±2.5	138.4±1.5	I2	M6	22.5	138.6/120.3	13.58
XPL3500	12	3500	25.8	3.5	2576	800	213.5±2.5	210.5±2.5	261±2.5	168.5±2	I2	M6	29.2	138.6/120.3	13.58
XPL4200	12	4200	28.3	3.1	2551	800	213.5±2.5	210.5±2.5	261±2.5	168.5±2	I2	M6	35.0	138.6/120.3	13.58
XPL4700	12	4700	32.6	2.9	3171	800	213.6±2.5	210.6±2.5	308.7±2.5	169±2	I2	M6	39.2	138.6/120.3	13.58
XPL5700	12	5700	36.2	2.3	3449	800	216.6±2.5	213.9±2.5	343±2.5	170±2	I2	M6	47.5	138.6/120.3	13.58
XPL6700	12	6700	47.2	2.4	3722	800	275.7±2.5	273.2±2.5	343±2.5	170±2	I2	M6	55.8	138.6/120.3	13.58

- *Nominal Capacity 5 min-rate to 1.6V per pcs @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

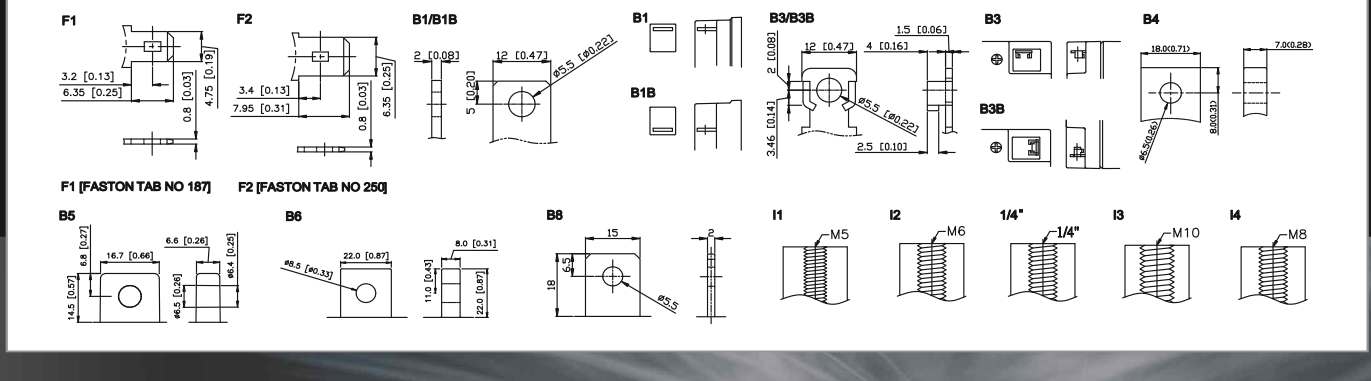
XHRL Series

Battery Type	Nominal Voltage (V)	Nominal Capacity (W/cell)*	Weight (Approx. Kg)	Internal Resistance Approx. (mΩ)	Short Circuit Current (A)	Max.Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Max. Screw Torque Value	
							Overall Height (H)	Container Height (h)	Length (L)	Width (W)				Kgf-cm/ lbf-in	N-m
XHRL12360W	12	360	28.30	3.10	2551	800	213.5±2.5	210.5±2.5	261.0±2.5	168.5±2.0	I2	M6	36.0	138.6/120.3	13.58
XHRL12410W	12	410	32.60	2.90	3171	800	213.6±2.5	210.6±2.5	308.7±2.5	169.0±2.0	I2	M6	41.0	138.6/120.3	13.58
XHRL12475W	12	475	36.20	2.30	3449	800	216.6±2.5	213.9±2.5	343.0±2.5	170.0±2.0	I2/ (1/4")	M6/ (1/4")	47.5	138.6/(126) 120.3/(109.4)	13.58/ (12.35)
XHRL12620W	12	620	47.20	2.40	3722	800	275.7±2.5	273.2±2.5	343.0±2.5	170.0±2.0	I2	M6	62.0	138.6/120.3	13.58

- *Nominal Capacity 15 min-rate to 1.67V per cell @25℃ (77℉)
- Charging voltage for standby Use : 2.275±0.025 V/Cell at 25℃ (77℉) ; Temp. Coefficient: -3.3mV/℃

All information is subject to change without (prior) notification. Please consult CSB website (www.csb-battery.com)for latest information.

Terminal Type



SALES OFFICE:

Hitachi Chemical Energy Technology Co., Ltd.
GLOBAL HQ

11F, No.150, Sec.4, Chengde Rd.,
Shilin Dist., Taipei City 11167, Taiwan (R.O.C.)
Tel : +886-2-2880-5600
Fax : +886-2-2888-3300
Mail : service@hitachi-chem-en.com.tw

Hitachi Chemical Energy Technology (Americas) Co., Ltd
AMERICA HQ

4008 Clay Avenue, Suite 210,
Haltom City, TX 76117, U.SA
Tel : +1-817-244-7777/ 1-(800)3-CSB-USA(272872)
Fax : +1-817-244-4445
Mail: service@hitachi-chem-en.us

Hitachi Chemical Energy Technology (Shanghai) Co., Ltd.
SHANGHAI OFFICE

Room 2105, Qiang Sheng Tower, Pu Jian Rd.,
Shanghai, China PC : 200127
Tel : +86-21-5046-1622 / +86-21-5046-0833
+86-21-5046-0094
Fax : +86-21-5046-1046
Mail : service@hitachi-chem.ensh.cn

CSB BATTERY TECHNOLOGIES (BEIJING) CO., LTD. (CHINA)
BEIJING OFFICE

Room 1009, 10th Building, Wanda Plaza,
Jianguo Rd., Chaoyang Dis., Beijing, China PC : 100022
Tel : +86-10-5820-5336 / +86-10-5820-5338
Fax : +86-10-5820-3053
Mail : chinasls@csb-battery.com

Hitachi Chemical Energy Technology (EMEA) B.V.
EUROPE HQ

Keurmeesterstraat 28-30,
2984 BA Ridderkerk, The Netherlands
Tel : +31-(0)-180-418-140
Fax : +31-(0)-180-418-327
Mail : service@hitachi-chem-en.co.nl

Hitachi Chemical Energy Technology (Shanghai) Co., Ltd.
SHENZHEN OFFICE

Room 2103-2105, Block East,
City Professional Hub, Shennan Avenue,
Futian, Shenzhen, China PC : 518040
Tel : +86-755-8831-6488 / +86-755-8831-6775
+86-755-8831-6075
Fax : +86-755-8831-6548
Mail : service@hitachi-chem.ensh.cn

MANUFACTURING SITE:

Hitachi Chemical Energy Technology Co., Ltd.
TAIWAN GUANTIAN FACTORY

No.16, Gongye W. Rd., Erzhen Village,
Guantian District, Tainan City 72048, Taiwan (R.O.C.)
Tel : +886-6-698-7600
Fax : +886-6-698-5734

Hitachi Chemical Energy Technology Co., Ltd (Philippines Branch)
PHILIPPINES FACTORY

Panorama Compound NO.7, South Avenue,
Phase3, PEZA, Rosario. Cavite, Philippines 4106
Tel : 63-46-437-0688 / 63-46-437-0838
Fax : 63-46-437-0980

Hitachi Chemical Energy Technology (Vietnam) Co., Ltd
VIETNAM FACTORY

Duong so 4, Khu Cong Nghiep Nhon Trach 3 – Giai Doan 2,
Xa Long Tho, Huyen NhonTrach, Tinh Dong Nai, Viet Nam
Tel : +84-61-356-9120
Fax : +84-61-356-9165