

XTV121100												
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	425	307	235	138	78.6	55.8	43.7	31.2	20.0	13.1	10.7	5.53
1.67V	382	289	227	135	77.5	55.4	43.5	30.8	19.9	13.0	10.6	5.52
1.70V	364	276	222	134	77.2	55.0	43.0	30.7	19.7	12.9	10.5	5.51
1.75V	339	254	207	130	75.6	54.0	42.5	30.3	19.5	12.8	10.4	5.50
1.80V	289	232	188	123	72.3	52.1	41.2	29.4	18.9	12.6	10.2	5.33
1.85V	231	200	163	114	67.1	48.8	38.9	28.2	18.2	12.0	9.86	5.15
Constant Power Discharge Characteristics Unit: W (25°C, 77°F)												
F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	4173	3108	2509	1543	890	640	505	363	236	155	126	66.7
1.67V	3921	2975	2418	1515	884	635	502	361	235	154	125	66.6
1.70V	3745	2914	2368	1508	880	633	501	359	234	153	124	66.1
1.75V	3384	2783	2251	1464	862	622	493	356	231	152	123	65.7
1.80V	2988	2573	2053	1411	827	600	479	346	228	149	122	64.9
1.85V	2719	2220	1834	1323	773	567	455	334	218	145	118	62.3



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Hitachi Chemical

HITACHI



BATTERY



Extreme Temperature Series
ENERGY OF INFINITY ▶

XTV series



Hitachi Chemical Energy Technology Co., Ltd.

XTV Series

XTV-series batteries are specially designed for extreme temperature (-20 to 50°C) in standby service. With VRLA technology, they are small, lightweight and offer a service life of up to 12 years in standby service. As with all our ISO/UL certified batteries, XTV series batteries are rechargeable, efficient, maintenance-free, leakproof and viable in any orientation.



In accordance with ICE 61056-1/2: 2012
or with IEC 60896-21/22: 2004
In accordance with BS6290-4

Features and Benefits :

- Optional flame-retardant container and cover complies with UL (94-V0)-28%L.O.I.
- XTV series battery is in line with EUROBAT guide for >12 YEARS VERY LONG LIFE.
- Innovative plate structure dramatically improve service life under harsh conditions
- Newly formulated lead paste sustains performance while reducing thermal runaway risk
- High-grade separator and new electrolyte formula extend battery life
- Uniformed plate formation for consistent capacity
- Improved Pd-Ca-Sn alloy resists grid corrosion
- Viable in any orientation
- No-spill design
- Maintenance free

Long Service Life :

- Up to 12 years of service life in floating charge conditions at 25°C(77°F)

Reliability :

- Our batteries are 100% 2-cycle tested by computer charge and discharge System (CCDS).
- Our batteries are UL-recognized components under UL 1989. (File Number with MH 14533)
- ISO 9001/14001/18001 certified.

Applications :

Standby use

- CATV
- Telemeters
- UPS power supply
- Workstation UPS
- Emergency lighting equipment
- Fire alarm and security systems
- Precision instrument backup power
- Communications and electrical equipment
- Office computers, microcomputers and OA equipment
- Robots, control equipment and other FA equipment
- Replacement of open-type stationary lead acid batteries
- Emergency power supply in power plants and substations
- Telecom applications (Distributed power, PHS, cellular and broadband)

Solar Cell Power Generation

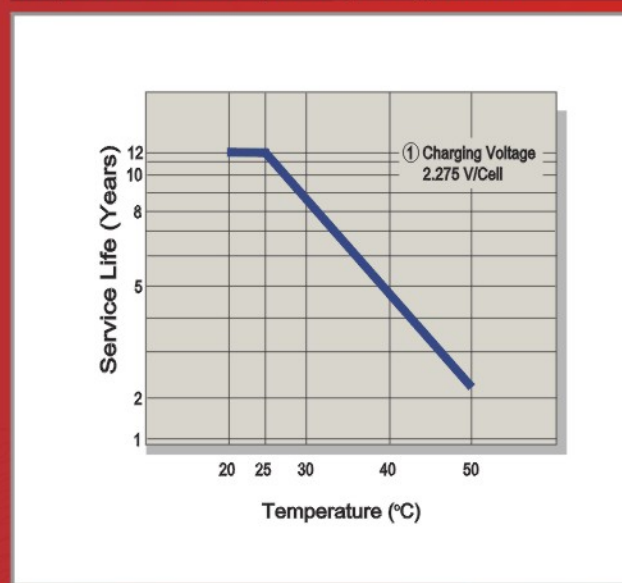
- Street lighting
- Portable power supply
- Water pumping
- Rural power systems

Specifications

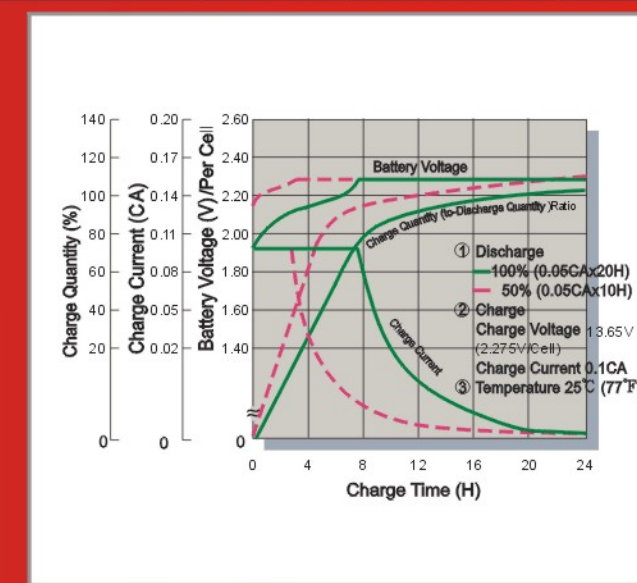
Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)*	Weight (Approx. Kg)	Internal Resistance (Approx. mΩ)	Short Circuit Current (A)	Max. Discharge Current 5 sec (A)	Dimensions (mm)				Terminal Type	Bolt	Max. Charge Current (A)	Kg-f/cm/Bf-in	Max. Screw Torque Value N-m
							Overall Height (H)	Container Height (h)	Length(L)	Width (W)					
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	1027	300	206.3±2.5	201.3±2.5	228.0±2.5	136.4±1.5	□	M6	16.5	138.6/120.3	13.98
XTV12800	12	80	25.50	4.70	1917	800	213.6±2.5	210.5±2.5	261.0±2.5	166.5±2.0	□	M6	24.0	138.6/120.3	13.98
XTV121000	12	100	30.20	4.10	2208	800	213.6±2.5	210.6±2.5	308.7±2.5	169.0±2.0	□	M6	30.0	138.6/120.3	13.98
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	□	M6	33.0	138.6/120.3	13.98

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

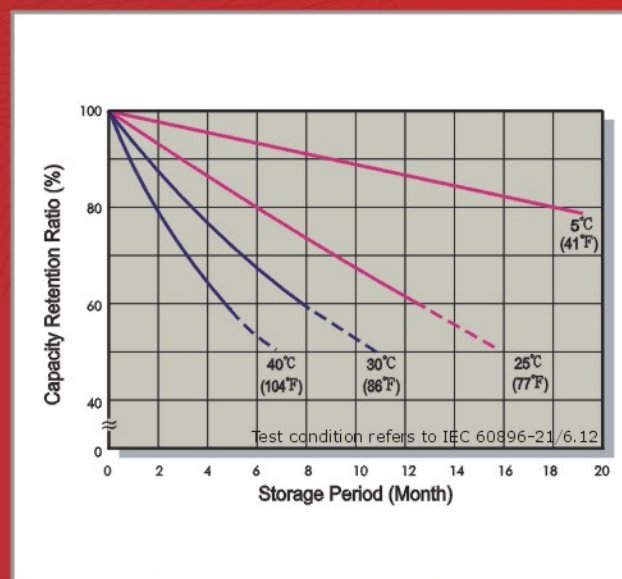
Expected Life vs. Operating Temperature



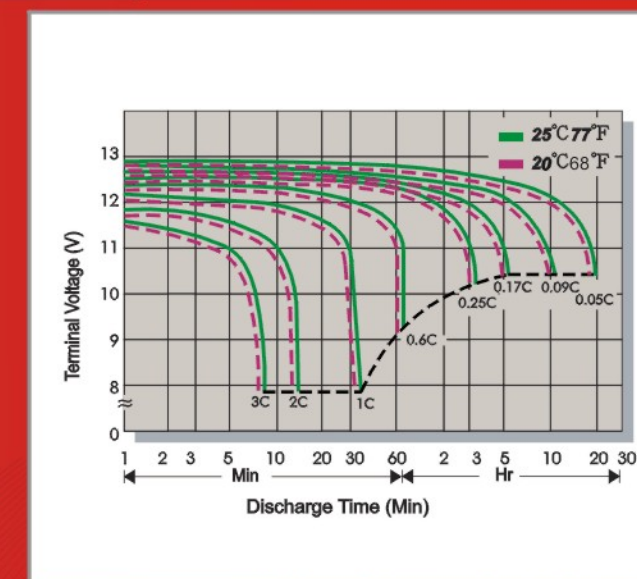
Battery Voltage and Charge Time for Standby Use



Capacity Retention Characteristics

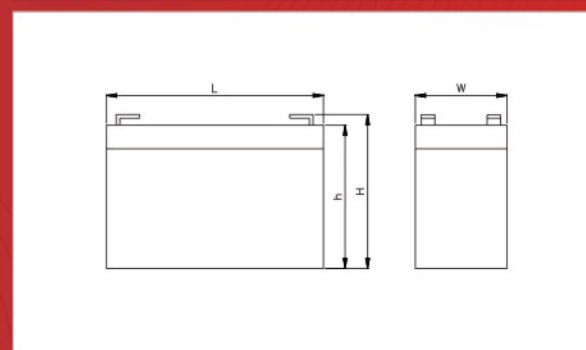


Discharge Characteristics

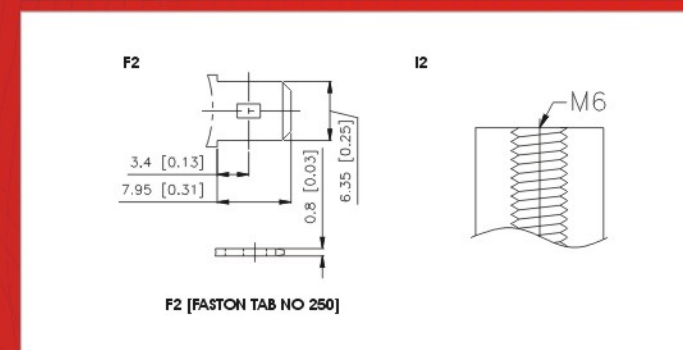


• The above diagrams are typical. For more detailed information please see the specific product sheets.
• C is the capacity of 20 hour-rate while the final voltage is 1.75V per cell.
For example, For example, 1C discharge current of XTV1272 is: 1 x 7.2 = 7.2 (A)

Battery Profile



Terminal Type



XTV1272

F.V/Time	Constant Current Discharge Characteristics Unit: A (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	27.7	17.7	13.4	7.94	4.60	3.35	2.67	1.93	1.25	0.88	0.72	0.40
1.67V	26.8	17.4	13.3	7.87	4.47	3.28	2.63	1.89	1.24	0.87	0.71	0.39
1.70V	25.8	17.1	13.2	7.81	4.41	3.24	2.61	1.89	1.23	0.86	0.70	0.38
1.75V	24.6	16.4	12.9	7.74	4.31	3.21	2.60	1.88	1.22	0.84	0.69	0.37
1.80V	21.8	15.4	12.3	7.52	4.22	3.16	2.57	1.86	1.21	0.82	0.68	0.36
1.85V	18.3	13.9	11.2	7.10	4.10	3.06	2.48	1.79	1.19	0.80	0.66	0.35

F.V/Time	Constant Power Discharge Characteristics Unit: W (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	299	193	149	89.8	54.8	40.0	32.1	23.1	15.2	10.3	8.64	4.68
1.67V	290	190	148	89.3	54.7	39.9	31.9	23.0	15.1	10.2	8.62	4.62
1.70V	282	188	147	88.8	54.5	39.8	31.8	22.9	15.0	10.1	8.59	4.60
1.75V	264	182	145	88.1	53.8	39.5	31.7	22.8	14.9	10.0	8.55	4.55
1.80V	239	173	138	86.3	53.2	39.1	31.4	22.7	14.8	9.92	8.50	4.50
1.85V	206	160	128	82.3	51.8	37.8	30.2	21.9	14.7	9.84	8.26	4.44

XTV12550

F.V/Time	Constant Current Discharge Characteristics Unit: A (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	247	166	123	71.8	41.0	29.0	22.7	16.2	10.6	6.89	5.58	2.84
1.67V	227	159	119	70.1	40.0	28.5	22.5	16.1	10.5	6.83	5.55	2.80
1.70V	216	155	117	69.5	39.7	28.3	22.4	16.0	10.4	6.74	5.48	2.79
1.75V	194	144	112	67.9	39.4	28.0	22.1	15.8	10.3	6.70	5.41	2.75
1.80V	172	130	105	64.9	38.1	27.3	21.7	15.4	10.1	6.54	5.31	2.73
1.85V	152	113	92.5	60.6	36.2	26.1	20.8	14.8	9.68	6.28	5.09	2.64

F.V/Time	Constant Power Discharge Characteristics Unit: W (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	2402	1693	1310	786	460	332	264	188	123	80.9	66.0	34.6
1.67V	2227	1642	1283	780	458	331	261	187	122	80.2	65.6	34.4
1.70V	2150	1590	1268	770	454	330	260	186	121	79.7	65.1	34.2
1.75V	2010	1519	1221	761	451	327	259	185	120	78.7	64.2	33.9
1.80V	1879	1411	1147	734	443	321	255	182	118	77.7	63.4	33.4
1.85V	1613	1279	1030	688	419	309	245	175	115	74.8	61.1	32.3

XTV12800

F.V/Time	Constant Current Discharge Characteristics Unit: A (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	303	204	155	92.7	54.7	40.1	31.6	22.1	14.3	9.49	7.82	4.13
1.67V	289	192	151	91.4	54.2	39.8	31.3	22.0	14.2	9.42	7.75	4.11
1.70V	255	185	148	90.8	53.8	39.5	31.1	21.9	14.1	9.38	7.73	4.08
1.75V	229	172	142	88.1	53.0	38.9	30.6	21.6	13.9	9.27	7.65	4.00
1.80V	202	157	128	83.5	51.3	38.0	29.9	21.2	13.6	9.12	7.53	3.96
1.85V	151	138	112	77.7	48.3	36.2	28.5	20.1	13.0	8.72	7.23	3.81

F.V/Time	Constant Power Discharge Characteristics Unit: W (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	2925	2114	1660	1033	627	464	367	262	170	112	92.7	49.3
1.67V	2742	2023	1618	1026	625	462	366	260	169	111	92.6	49.2
1.70V	2649	1977	1596	1014	621	459	363	258	168	110	92.5	49.0
1.75V	2438	1867	1517	996	614	454	361	256	167	109	91.8	48.5
1.80V	2143	1746	1397	951	594	444	352	251	165	108	89.8	47.8
1.85V	1775	1507	1242	898	560	424	335	242	158	106	86.9	45.9

XTV121000

F.V/Time	Constant Current Discharge Characteristics Unit: A (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	371	259	194	116	67.8	48.9	38.7	27.7	17.7	11.6	9.54	5.05
1.67V	328	242	188	114	67.2	48.7	38.4	27.4	17.5	11.5	9.47	5.02
1.70V	309	231	184	113	66.7	48.3	38.0	27.3	17.4	11.4	9.45	5.01
1.75V	282	212	173	110	65.5	47.7	37.6	26.9	17.3	11.3	9.38	5.00
1.80V	243	193	157	104	63.0	46.3	36.5	26.1	16.8	11.2	9.16	4.84
1.85V	191	170	138	96.9	59.1	43.8	34.6	25.2	16.1	10.7	8.82	4.63

F.V/Time	Constant Power Discharge Characteristics Unit: W (25°C, 77°F)											
	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	3591	2638	2095	1307	778	589	450	323	211	138	114	59.9
1.67V	3382	2513	2029	1286	775	587	447	321	210	137	113	59.6
1.70V	3268	2445	1987	1274	771	584	445	319	209	136	112	59.3
1.75V	2932	2308	1880	1245	761	577	440	316	207	135	111	59.0
1.80V	2572	2149	1727	1192	735	545	429	308	203	133	110	58.1
1.85V	2255	1872	1546	1125	695	519	412	297	194	129	105	55.9