

data safe®

16HX-FT

Uninterruptible Power Supply (UPS) Applications

Battery Range Summary

Delivering more power in less space, DataSafe® HX front terminal 16V Uninterruptible Power Supply (UPS) batteries eliminate the difficult maintenance and burdensome space requirements of top terminated 12V UPS batteries.

Manufactured with proven Valve Regulated Lead Acid (VRLA) technology, DataSafe HX front terminal batteries are conducive to incorporating monitoring systems and scale easily to larger capacity UPS systems with one-quarter fewer parallel battery strings.

Built on well established electrochemistry and available in 550 WPC, 800 WPC and 925 WPC sizes, these batteries are more space efficient, more cost effective and easier to maintain than 12V batteries.

Features and Benefits

- Smaller footprint per kilowatt than top terminated 12V batteries – more than 20% space savings for a full 15 minute run time for 750kVA UPS systems
- Eliminates wasted headspace found in typical 12V top terminated designs
- Complete front access simplifies installation
- Easy terminal access simplifies maintenance – no costly slide out trays required
- Improves reliability
- 800 and 925 WPC design reduces number of parallel strings required
- Up to 50% fewer connections means less maintenance
- Scales easily to large capacity UPS systems
- Fits within many existing cabinet designs including DataSafe HX Front Terminal 16V Series Battery Racks (see back)



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Publication No. US-HXFT-RS-AA - September 2016

Construction

Insulating covers

Voltmeter probe access enhances safety and simplifies maintenance routines.

Integrated handle support

Doubles as an automatic spacer between units to enhance airflow and thermal management.

Nord-Lock® washer

Provides secure front terminal M8 connection over the life of the battery.

Solid tin-plated copper busbars

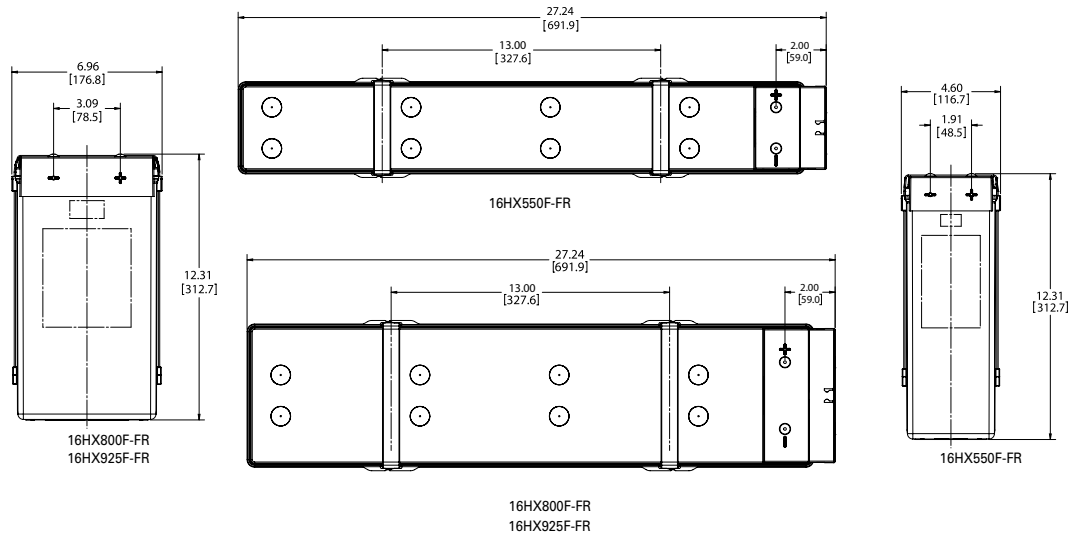
Reduce connection resistance to enhance power delivery from the battery system

Dual-tab washer

Enables quick connection to battery monitoring systems

Polypropylene strap handle

Simplifies installation, removal and replacement.



Note: All measurements shown in inches [millimeters]

General Specifications

Battery Specifications

Model	Watts/Cell			Nominal Dimension								Unpacked	
	Number of Cells	Nominal Voltage (V)	15 min rate to 1.67 @ 77°F (25°C)	Length		Width		Height		lbs	kg		
				in	mm	in	mm	in	mm				
16HX550F-FR	8	16	550	27.2	692	4.6	117	12.3	313	151	68.5		
16HX800F-FR	8	16	800	27.2	692	7.0	177	12.3	313	232	105.2		
16HX925F-FR	8	16	925	27.2	692	7.0	177	12.3	313	248	112.5		

16HX550F-FR Constant Power Discharge (Watts per cell at 77°F (25°C))

End Volts	Standby Time (Minutes)																						
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240
1.60	927	873	825	780	738	700	666	635	607	581	556	534	513	491	472	453	382	332	242	191	136	106	58
1.63	911	860	813	769	730	694	661	631	604	579	556	534	513	491	472	453	382	332	242	191	136	106	58
1.65	898	849	802	760	723	688	656	627	601	576	554	532	512	491	472	453	382	332	242	191	136	106	58
1.67	884	836	790	750	713	680	650	622	596	572	550	529	508	488	469	452	382	332	242	191	136	106	58
1.70	859	811	769	731	697	665	637	611	587	564	543	521	500	481	463	446	380	332	242	191	136	106	58
1.75	802	762	725	691	660	632	606	582	561	539	518	498	479	462	445	430	370	324	239	190	136	106	58

16HX800F-FR Constant Power Discharge (Watts per cell at 77°F (25°C))

End Volts	Standby Time (Minutes)																						
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240
1.60	1197	1197	1197	1143	1085	1032	984	939	899	862	827	796	767	740	715	691	590	516	378	301	216	170	94
1.63	1197	1197	1177	1117	1063	1013	967	925	887	851	818	787	759	733	709	686	590	516	378	301	216	170	94
1.65	1197	1197	1154	1097	1046	998	954	914	877	842	810	780	753	727	703	681	588	516	378	301	216	170	94
1.67	1197	1191	1130	1075	1026	981	939	900	865	831	800	772	745	720	697	675	584	515	378	301	216	170	94
1.70	1197	1146	1089	1039	993	951	912	876	843	812	783	756	730	707	684	663	576	508	378	301	216	170	94
1.75	1114	1060	1012	967	927	889	855	824	794	767	742	718	696	675	655	636	556	493	370	297	216	170	94

Battery Range Summary

16HX925F-FR Constant Power Discharge (Watts per cell at 77°F (25°C))

End Volts	Standby Time (Minutes)																						
	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	25	30	45	60	90	120	240
1.60	1310	1310	1310	1279	1217	1159	1103	1054	1011	970	931	896	863	827	795	765	650	569	417	332	238	187	102
1.63	1310	1310	1310	1265	1205	1151	1100	1052	1008	968	931	896	863	827	795	765	650	569	417	332	238	187	102
1.65	1310	1310	1310	1252	1195	1143	1093	1048	1005	966	929	894	860	826	795	765	650	569	417	332	238	187	102
1.67	1310	1310	1297	1237	1183	1132	1084	1040	999	961	925	891	856	822	790	762	650	569	417	332	238	187	102
1.70	1310	1310	1266	1210	1158	1109	1064	1023	984	947	913	878	842	810	780	752	644	567	417	332	238	187	102
1.75	1310	1256	1201	1149	1101	1058	1017	980	944	909	871	837	805	775	747	723	625	551	410	329	238	187	102

16HX550F-FR Constant Current Discharge (Amperes at 77°F (25°C))

End Volts	Standby Time (Minutes)												Standby Time (Hours)													
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.60	690	566	410	314	247	206	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.63	690	548	403	314	247	206	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.65	690	535	398	312	247	206	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.67	690	521	391	309	247	206	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.69	664	506	384	304	245	206	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.71	635	490	375	299	242	205	178	157	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.73	603	473	364	292	238	202	176	156	141	128	117	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.75	570	454	353	284	233	199	173	154	139	127	116	107	100	70.5	54.7	44.9	38.2	29.6	24.2	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.80	486	405	321	258	216	187	164	147	133	121	111	103	95.7	68.6	53.7	44.3	37.8	29.5	24.1	20.5	17.8	15.7	14.0	12.7	10.7	5.43
1.85	393	350	278	227	193	168	149	134	122	111	103	95.3	89.1	64.3	50.5	41.7	35.7	27.9	22.8	19.4	16.8	14.8	13.3	12.1	10.1	5.19

16HX800F-FR Constant Current Discharge (Amperes at 77°F (25°C))

End Volts	Standby Time (Minutes)												Standby Time (Hours)													
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.60	846	788	623	478	387	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.63	846	777	601	469	387	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.65	839	769	584	462	382	325	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.67	828	751	568	454	377	322	281	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.69	813	729	552	445	371	318	279	248	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.71	799	703	536	436	365	314	275	245	222	202	185	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.73	785	673	518	424	357	308	271	242	219	200	184	171	159	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.75	771	640	498	411	349	302	266	238	215	197	182	169	157	113	87.9	72.4	61.8	47.8	39.2	33.3	29.0	25.7	23.1	21.0	17.8	9.28
1.80	641	553	447	373	320	281	249	224	204	187	173	161	150	109	85.6	70.9	60.8	47.2	38.8	33.1	28.8	25.6	23.1	21.0	17.8	9.28
1.85	505	468	388	328	284	250	224	203	185	171	158	148	139	101	80.2	66.7	57.1	44.5	36.7	31.3	27.3	24.3	21.9	19.9	16.9	8.93

16HX925F-FR Constant Current Discharge (Amperes at 77°F (25°C))

End Volts	Standby Time (Minutes)												Standby Time (Hours)													
	1	5	10	15	20	25	30	35	40	45	50	55	1	1.5	2	2.5	3	4	5	6	7	8	9	10	12	24
1.60	844	843	679	528	420	354	308	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.63	844	843	671	528	420	354	308	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.65	844	843	663	525	420	354	308	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.67	844	843	652	520	419	354	308	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.69	844	824	640	513	414	353	308	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.71	844	798	626	503	409	349	306	272	245	222	204	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.73	844	772	610	491	402	344	301	268	242	221	203	188	175	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.75	844	745	592	477	393	337	296	264	239	218	201	186	174	124	96.8	79.6	67.7	52.4	42.7	36.1	31.3	27.6	24.7	22.3	18.8	9.58
1.80	808	671	541	434	365	315	278	249	226	207	191	178	166	120	94.2	77.9	66.6	51.8	42.4	35.9	31.2	27.5	24.6	22.3	18.8	9.58
1.85	653	585	467	382	325	284	252	227	206	190	175	164	153	111	88.1	73.1	62.7	48.9	40.1	34.0	29.6	26.1	23.4	21.2	17.9	9.17

Rates subject to change without notice.

DataSafe® 16V HX Front Terminal Battery Racks

DataSafe® HX Front Terminal 16V Series Battery Racks* (See Figure 1) are available in UBC Zone 0 as well as at or Below Grade Rated UBC Zone 4. Visit www.enersys.com for more information.

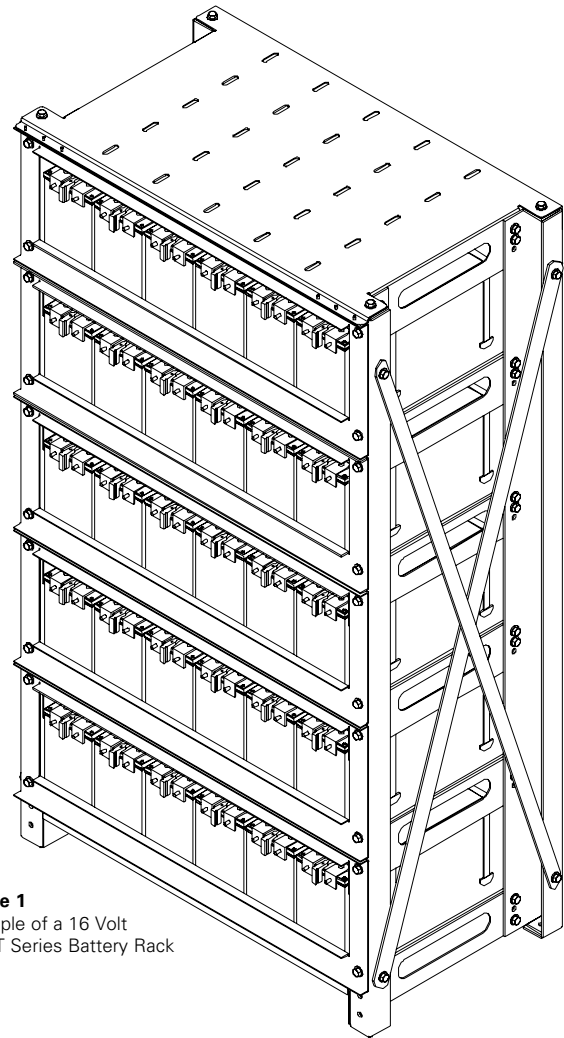


Figure 1
Example of a 16 Volt
HX-FT Series Battery Rack

16HX-FT Battery	Zone 0 Rack	Zone 4 Rack
16HX500F-FR	US-UAPx-RK	US-UJPx-RK
16HX800F-FR	US-UAQx-RK	US-UJQx-RK
16HX925F-FR	US-UAQx-RK	US-UJQx-RK

* Battery Rack Accessories, inter-unit and inter-tier connectors etc., are not included in Rack or Battery prices as their size varies based on the specific site application or rates. Once properly sized and quoted by EnerSys, Battery Rack Accessories are available and sold as separate line items.

DataSafe® 16V HX Front Terminal Battery Cabinet Systems

Cabinet System Model Number**	Model	# of Units	Voltage	Width		Depth		Height		Single-String System Weight	15 MIN kWb @ 1.67 at 77°F (25°C)			
				in	mm	in	mm	in	mm		1 String	2 String	3 String	4 String
SS65550480BL600A	16HX550F-FR	30	480	42.5	1080	31.5	800	72.0	1829	5250	132.0	264.0	396.0	528.0
ST64550384BL600A	16HX550F-FR	24	384	32.0	813	31.5	800	72.0	1829	4400	105.6	211.2	316.8	422.4
ST65550480BL600A	16HX550F-FR	30	480	32.0	813	31.5	800	84.0	2134	5250	132.0	264.0	396.0	528.0
SS65800480BL600A	16HX800F-FR	30	480	60.8	1543	31.5	800	72.0	1829	8500*	192.0	384.0	576.0	768.0
ST64800384BL600A	16HX800F-FR	24	384	50.0	1270	31.5	800	72.0	1829	7000*	153.6	307.2	480.8	614.4
ST65800480BL600A	16HX800F-FR	30	480	50.0	1270	31.5	800	84.0	2134	8500*	192.0	384.0	576.0	768.0
SS65925480BL600A	16HX925F-FR	30	480	60.8	1543	31.5	800	72.0	1829	8960*	222.0	444.0	666.0	888.0
ST64925384BL600A	16HX925F-FR	24	384	50.0	1270	31.5	800	72.0	1829	7448*	177.6	355.2	532.8	710.4
ST65925480BL600A	16HX925F-FR	30	480	50.0	1270	31.5	800	84.0	2134	8960*	222.0	444.0	666.0	888.0

*16HX800F-FR and 16HX925F-FR string consists of two cabinets, each cabinet weight is half the single-string system weight.

**Each cabinet system is single-string. For multi-string systems, order multiple cabinet systems.

