ACES LI POWER LiFePO4 Batteries HFA series specifications

MODEL NAME	AL12V24HFA	AL12V60HFA-BT	AL12V80HFA-BT	AL12V100HFA-BT	AL12V150HFA-BT	AL12V200HFA-BT	AL12V320HFA-BT	AL12V400HFA-BT	AL24V12HFA	AL24V30HFA-BT	AL24V50HFA-BT	AL24V84HFA-BT	AL24V100HFA-BT	AL24V160HFA-BT	AL24V200HFA-BT	AL48V12HFA-BT	AL48V18HFA-BT	AL48V30HFA-BT	AL48V80HFA-BT	AL48V100HFA-BT	AL72V30HFA-BT	AL72V60HFA-BT
ELECTRICAL																						
Voltage (V)	12	12	12	12	12	12	12	12	24	24	24	24	24	24	24	48	48	48	48	48	72	72
Nominal voltage	12,8	12,8	12,8	12,8	12,8	12,8	12,8	12,8	25,6	25,6	25,6	25,6	25,6	25,6	25,6	51,2	51,2	51,2	51,2	51,2	73,6	73,6
Max. charge voltage	14,6	14,6	14,6	14,6	14,6	14,6	14,6	14,6	29,2	29,2	29,2	29,2	29,2	29,2	29,2	58,4	58,4	58,4	58,4	58,4	82,7	82,7
Capacity (AH) at 0.2C	24	60	80	100	150	200	320	400	12	30	50	84	100	160	200	12	18	30	80	100	30	60
Energy (Wh)	307	768	1024	1280	1920	2560	4096	5120	307	768	1280	2150	2560	4096	5120	614	922	1536	4096	5120	2208	4416
Operational Voltage range (V)	11...14,6	11...14,6	11...14,6	11...14,6	11...14,6	11...14,6	11...14,6	11...14,6	22...29,2	22...29,2	22...29,2	22...29,2	22...29,2	22...29,2	22...29,2	44...58,4	44...58,4	44...58,4	44...58,4	44...58,4	63.0...77.6V	63.0...77.6V
Floating voltage (V)	13.6...13,8	13.6...13,8	13.6...13,8	13.6...13,8	13.6...13,8	13.6...13,8	13.6...13,8	13.6...13,8	27.2...27.6	27.2...27.6	27.2...27.6	27.2...27.6	27.2...27.6	27.2...27.6	27.2...27.6	54.4...55,2	54.4...55,2	54.4...55,2	54.4...55,2	54.4...55,2	78...79.3	78...79.3
Cycle Life (80% DOD) 0.2C	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Parallel connection	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4	Up to 4
Series connection	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no	no
DISCHARGE																						
Continuous current (A)	24	60	80	100	150	150	150	150	12	30	50	84	100	150	150	12	18	30	80	100	30	60
Peak current (A)	100	200	300	300	360	360	360	360	80	140	220	220	350	400	400	50	80	100	220	220	120	220
Overdischarge protection (V)	10	10	10	10	10	10	10	10	20	20	20	20	20	20	20	40	40	40	40	40	58	58
Fast short circuit protection	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Internal fuse	60A	150A	200A	250A	300	400A	400A	400A	40A	80A	125A	200A	250A	400A	400A	40A	60	100A	200A	250	100	200
CHARGE																						
Max. charge current	24	60	80	100	150	150	150	150	12	30	50	84	100	150	150	12	18	30	80	100	30	60
Recommended charge cur. (A)	3...12	6...30	8...40	10...50	10...50	15...75	40...100	40...100	1...6	3...15	5...25	8...42	10...50	15...75	20...100	1...6	2...9	2...15	8...40	10...50	3...15	6...30
Charge Voltage to 100% (V)	14,4...14,6	14,4...14,6	14,4...14,6	14,4...14,6	14,4...14,6	14,4...14,6	14,4...14,6	14,4...14,6	28,8...29,2	28,8...29,2	28,8...29,2	28,8...29,2	28,8...29,2	28,8...29,2	28,8...29,2	14,4...14,6	14,4...14,6	14,4...14,6	57,6...58,4	57,6...58,4	80...82,8	80...82,8
Charging characteristic	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV	CC /CV
Recommended ACES charger	ABC150-1210LF	ABC300-1210LF	ABC300-1210LF	ABC700-1220LF	ABC900F-1230LF	ABC900F-1230LF	ABC1000-1260LF	ABC1000-1260LF	ABC150-2405LF	ABC150-2405LF	ABC300F-2412LF	ABC700-2420LF	ABC900F-2430LF	ABC900F-2430LF	ABC2000-2450LF	ABC300-4805LF	ABC300-4805LF	ABC300-4805LF	ABC1350-4825LF	ABC1350-4825LF	ABC1350-7218LF	ABC1350-7218LF
MECHANICAL																						
Dimensions (mm)	181 x 76 x 167	197 x 166 x 173	260 x 168 x 209	306 x 168 x 211	483 x 170 x 240	522 x 239 x 218	522 x 267 x 218	522 x 267 x 218	181 x 76 x 167	197 x 166 x 173	306 x 168 x 211	483 x 170 x 240	522 x 239 x 218	522 x 267 x 218	522 x 267 x 218	197 x 166 x 173	260 x 168 x 209	330 x 172 x 215	522 x 267 x 218	522 x 267 x 218	483 x 170 x 240	522 x 267 x 218
Weight (kg)	2,8	7,0	9,3	11,5	19,0	22,0	32,0	39,0	2,8	7,0	11,5	19,0	22,0	32,0	39,0	6,0	8,4	13,5	32,0	39,0	20,0	40,0
Protection IP class	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
Terminals	M5	M8	M8	M8	M8	M8	M8	M8	M5	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8	M8
Cell type (LiFePO4)	Cylindric	Cylindric	Cylindric	Cylindric	Pouch	Prismatic	Prismatic	Prismatic	Cylindric	Cylindric	Cylindric	Cylindric	Prismatic	Prismatic	Prismatic	Cylindric	Cylindric	Cylindric	Prismatic	Prismatic	Cylindric	Pouch
TEMPERATURE																						
Discharge Temperature	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C	-20...60°C
Charge Temperature	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C	0...45°C
Recommended storage temp.	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C	5...30°C
BMS Cut-Off temperature	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C	70°C