

RFE Li-ion Batteries

RealForce Product List

2009.10

Batteries



Cylindrical Battery Cells



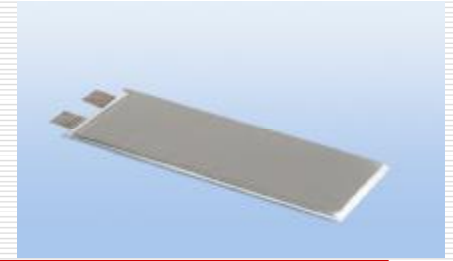
Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Continuous Discharge Rate	Battery weight (Approx.)	Measurement (T*W*L)
RFE-F18650P	LiFePO4	3.2	1.1	≤15	≥1200	3.65V	2.0V	15C	47g	18×65
RFE-F18650E	LiFePO4	3.2	1.35	≤60	≥1200	3.65V	2.0V	3C	47g	18×65
RFE-F26650P	LiFePO4	3.2	2.2	≤15	≥1200	3.65V	2.0V	15C	74g	26×65
RFE-F26650E	LiFePO4	3.2	3.3	≤40	≥1200	3.65V	2.0V	3C	74g	26×65
RFE-F26650E	LiFePO4	3.2	3.0	≤40	≥1200	3.65V	2.0V	3C	74g	26×65
RFE-C18650E	LiCoO2	3.7	2.2	≤60	≥300 (0.5C)	4.2V	2.75V	1C	47g	18×65
RFE-C18650E	LiCoO2	3.7	2.0	≤60	≥300 (0.5C)	4.2V	2.75V	1C	47g	18×65

Electric Tool Batteries



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Continuous Discharge Rate	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-3F18650	LiFePO4	9.6V	1100mAh	≤80	≥1200	10.95V	6.0V	10C	150g	
RFE-4F18650	LiFePO4	12.8V	1100mAh	≤100	≥1200	14.6V	8.0V	10C	200g	
RFE-5F18650	LiFePO4	16.0V	1100mAh	≤120	≥1200	18.25V	10.0V	10C	250g	
RFE-6F18650	LiFePO4	19.2V	1100mAh	≤140	≥1200	21.9V	12.0V	10C	300g	
RFE-3F26650	LiFePO4	9.6V	2200mAh	≤80	≥1200	10.95V	6.0V	10C	280g	
RFE-4F26650	LiFePO4	12.8V	2200mAh	≤100	≥1200	14.6V	8.0V	10C	360g	
RFE-5F26650	LiFePO4	16.0V	2200mAh	≤120	≥1200	18.25V	10.0V	10C	450g	
RFE-6F26650	LiFePO4	19.2V	2200mAh	≤140	≥1200	21.9V	12.0V	10C	530g	

Prismatic Battery Cells



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (T*W*L)
RFE-F8	LiFePO4	3.2	8	≤20	≥1200	3.65V	2.0V	16A	260g	7.5×68×260
RFE-F10	LiFePO4	3.2	10	≤15	≥1200	3.65V	2.0V	20A	270g	7.5×68×270
RFE-F10	LiFePO4	3.2	10	≤15	≥1200	3.65V	2.0V	20A	280g	10×80×225
RFE-F10	LiFePO4	3.2	10	≤18	≥1200	3.65V	2.0V	20A	280g	10×90×180
RFE-F10	LiFePO4	3.2	10	≤15	≥1200	3.65V	2.0V	20A	270g	8×95×260
RFE-F20	LiFePO4	3.2	20	≤8	≥1200	3.65V	2.0V	40A	590g	10×150×225
RFE-F50	LiFePO4	3.2	50	≤3	≥1200	3.65V	2.0V	100A	1400g	12×235×248
RFE-M10	LiMn2O4	3.7	10	≤15	≥500	4.2V	2.75V	20A	280g	9×83×225
RFE-M10	LiMn2O4	3.7	10	≤15	≥500	4.2V	2.75V	20A	280g	8.3×68×270

Electric Bike Batteries



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-8F10	LiFePO4	24	10	≤80	≥1200	29.2V	16V	20A	3.0Kg	87×87×390
RFE-8F8	LiFePO4	24	8	≤80	≥1200	29.2V	16V	16A	2.8Kg	87×87×390
RFE-12F10	LiFePO4	36	10	≤100	≥1200	43.8V	24V	20A	4.3Kg	77×110×395
RFE-7M10	LiMn2O4	24	10	≤80	≥500	29.4V	19.6V	20A	2.8Kg	87×87×390
RFE-7M8	LiMn2O4	24	8	≤80	≥500	29.4V	19.6V	16A	2.6Kg	86×86×390
RFE-10M10	LiMn2O4	36	10	≤100	≥500	42V	28V	20A	4Kg	77×110×395

Custom design is available for other models.

Battery Packs(LiFePO4)



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-F100	LiFePO4	3.2	100	≤1.5	≥1200	3.65	2	200A	3.8Kg	67*167*262
RFE-4F10	LiFePO4	12	10	≤60	≥1200	14.6	8	20A	1.5Kg	33*70*290 43*92*200 43*82*240
RFE-8F10	LiFePO4	24	10	≤80	≥1200	29.2	16	20A	2.8Kg	64*70*290 85*92*200 85*82*240
RFE-8F20	LiFePO4	24	20	≤40	≥1200	29.2	16	40A	5.4Kg	90*160*250 170*90*250 170*100*200 130*75*290
RFE-8F30	LiFePO4	24	30	≤30	≥1200	29.2	16	60A	7.8Kg	250*90*250 250*100*200 190*75*290
RFE-8F40	LiFePO4	24	40	≤20	≥1200	29.2	16	60A	10Kg	335*90*250 170*175*250 335*100*200 170*195*200 255*75*290 130*150*290 170*160*250

Battery Packs(LiFePO4)



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-8F100	LiFePO4	24	100	≤12	≥1200	29.2	16	200A	34Kg	550*175*300
RFE-8F200	LiFePO4	24	200	≤8	≥1200	29.2	16	300A	66Kg	1100*180*300 550*350*300
RFE-12F10	LiFePO4	36	10	≤180	≥1200	43.8	24	20A	4Kg	95*70*290 125*92*200 125*82*240
RFE-12F20	LiFePO4	36	20	≤90	≥1200	43.8	24	40A	8Kg	125*160*250 250*90*250 250*100*200 190*75*290
RFE-12F30	LiFePO4	36	30	≤60	≥1200	43.8	24	60A	11.5Kg	375*90*250 375*100*200 285*75*290
RFE-12F40	LiFePO4	36	40	≤45	≥1200	43.8	24	80A	16Kg	500*90*250 255*175*250 500*100*200 255*195*200 375*75*290 195*150*290 255*160*250

Battery Packs(LiFePO4)



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-12F60	LiFePO4	36	60	≤60	≥1200	43.8	24	120	23Kg	380*160*250
RFE-12F100	LiFePO4	36	100	≤20	≥1200	43.8	24	200	48Kg	820*175*300 420*350*300
RFE-16F10	LiFePO4	48	10	≤240	≥1200	58.4	32	20	5Kg	125*70*290 170*92*200 170*82*240
RFE-16F20	LiFePO4	48	20	≤120	≥1200	58.4	32	40	10Kg	180*160*250 340*90*250 340*100*200 180*195*200 260*80*290 135*150*290
RFE-16-30	LiFePO4	48	30	≤80	≥1200	58.4	32	60	16Kg	510*90*250 260*170*250 510*100*200 260*195*205 390*80*290 200*150*295

Battery Packs(LiFePO4)



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-16F40	LiFePO4	48	40	≤60	≥1200	58.4	32	80	21Kg	670*95*250 350*160*250 670*105*205 350*200*205 510*85*295 260*150*295
RFE-16F100	LiFePO4	48	100	≤25	≥1200	58.4	32	200	65Kg	1120*180*300 600*360*300
RFE-24F20	LiFePO4	72	20	≤180	≥1200	87.6	48	40	16Kg	510*90*250 260*160*250 510*100*205 260*195*205 390*75*300 200*150*300 140*320*250
RFE-24F40	LiFePO4	72	40	≤90	≥1200	87.6	48	80	31Kg	510*175*255 350*260*255 510*195*210 350*300*210 260*390*210 390*150*300 260*225*300 200*295*300

Battery Packs(LiFePO4)



Model	Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)	Internal Resistance (mΩ)	Life Cycles	Maximum Charge Voltage (V)	Cut-off Discharge Voltage (V)	Maximum Continuous Discharge Current (A)	Battery weight (Approx.)	Measurement (mm) (L*W*H)
RFE-24F100	LiFePO4	72	100	≤35	≥1200	87.6	48	200	100Kg	860*350*290 590*520*290 730*420*290
RFE-24F200	LiFePO4	72	200	≤25	≥1200	87.6	48	300	190Kg	—————
RFE-48F40	LiFePO4	144	40	≤180	≥1200	175.2	96	80	60Kg	540*330*260 350*510*260 290*650*260
RFE-48F100	LiFePO4	144	100	≤75	≥1200	175.2	96	200	190Kg	1160*550*300 900*720*300 580*1120*300

Custom design is available for other models.

Battery Chargers



Li-ion Battery Chargers



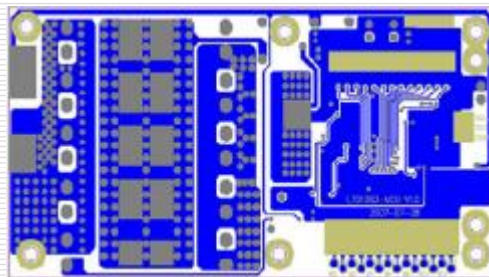
Model	Applying Battery Type	Input Voltage (AC/V)	Output Voltage (DC/V)	Output Current (A)	Charging Mode	Case Material	Charger Weight (Approx.)	Measurement (L*W*H)
RFE-C12F2	LiFePO4	AC110V/220V	DC 14.6V	2A	CC/CV	Plastic	0.6Kg	150*90*60mm
RFE-C24F2	LiFePO4	AC110V/220V	DC 29.2V	2A	CC/CV	Plastic	0.6Kg	150*90*60mm
RFE-C36F2	LiFePO4	AC110V/220V	DC 43.8V	2A	CC/CV	Plastic	0.6Kg	150*90*60mm
RFE-C48F2	LiFePO4	AC110V/220V	DC 58.4V	2A	CC/CV	plastic	0.6Kg	150*90*60mm
RFE-C12F2	LiFePO4	AC110V/220V	DC 14.6V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C24F2	LiFePO4	AC110V/220V	DC 29.2V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C36F2	LiFePO4	AC110V/220V	DC 43.8V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48F2	LiFePO4	AC110V/220V	DC 58.4V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48F5	LiFePO4	AC110V/220V	DC 58.4V	5A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48F10	LiFePO4	AC110V/220V	DC 58.4V	10A	CC/CV	Aluminum Alloy	?Kg	
						Aluminum		

Li-ion Battery Chargers



Model	Applying Battery Type	Input Voltage (AC/V)	Output Voltage (DC/V)	Output Current (A)	Charging Mode	Case Material	Charger Weight (Approx.)	Measurement (L*W*H)
RFE-C12M2	LiMn2O4	AC110V/220V	DC 12.6V	2A	CC/CV	Plastic	0.5Kg	150*90*60mm
RFE-C24M2	LiMn2O4	AC110V/220V	DC 29.4V	2A	CC/CV	Plastic	0.5Kg	150*90*60mm
RFE-C36M2	LiMn2O4	AC110V/220V	DC 42.0V	2A	CC/CV	Plastic	0.5Kg	150*90*60mm
RFE-C48M2	LiMn2O4	AC110V/220V	DC 54.6V	2A	CC/CV	plastic	0.5Kg	150*90*60mm
RFE-C12M2	LiMn2O4	AC110V/220V	DC 12.6V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C24M2	LiMn2O4	AC110V/220V	DC 29.4V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C36M2	LiMn2O4	AC110V/220V	DC 42.0V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48M2	LiMn2O4	AC110V/220V	DC 54.6V	2A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48M5	LiMn2O4	AC110V/220V	DC 54.6V	5A	CC/CV	Aluminum Alloy	1.3Kg	170*90*50mm
RFE-C48M10	LiMn2O4	AC110V/220V	DC 54.6V	10A	CC/CV	Aluminum Alloy	Kg	

PCM/BMS Series



PCM For Li-ion Battery



Model	Applying Battery Type	Battery Nominal Voltage	Continuous Working Current	Balance Charge Function	Overcharge Protection	Over-Discharge Protection	Short Circuit Protection	PCM Energy Consumption	Measurement (L*W*T)
RFE-P3M20	LiMn2O4	11.1V	20A	Have	Have	Have	Have	≤200uA	60*60*16mm
RFE-P4F20	LiFePO4	12V	20A	Have	Have	Have	Have	≤200uA	60*60*160mm
RFE-P7M20	LiMn2O4	24V	20A	Have	Have	Have	Have	≤200uA	60*70*16mm
RFE-P8F20	LiFePO4	24V	20A	Have	Have	Have	Have	≤200uA	60*70*16mm
RFE-P10M20	LiMn2O4	36V	20A	Have	Have	Have	Have	≤200uA	60*80*16mm
RFE-P12F20	LiFePO4	36V	20A	Have	Have	Have	Have	≤200uA	60*80*16mm
RFE-P13M20	LiMn2O4	48V	20A	Have	Have	Have	Have	≤200uA	60*90*16mm
RFE-P16F20	LiFePO4	48V	20A	Have	Have	Have	Have	≤200uA	60*90*16mm