

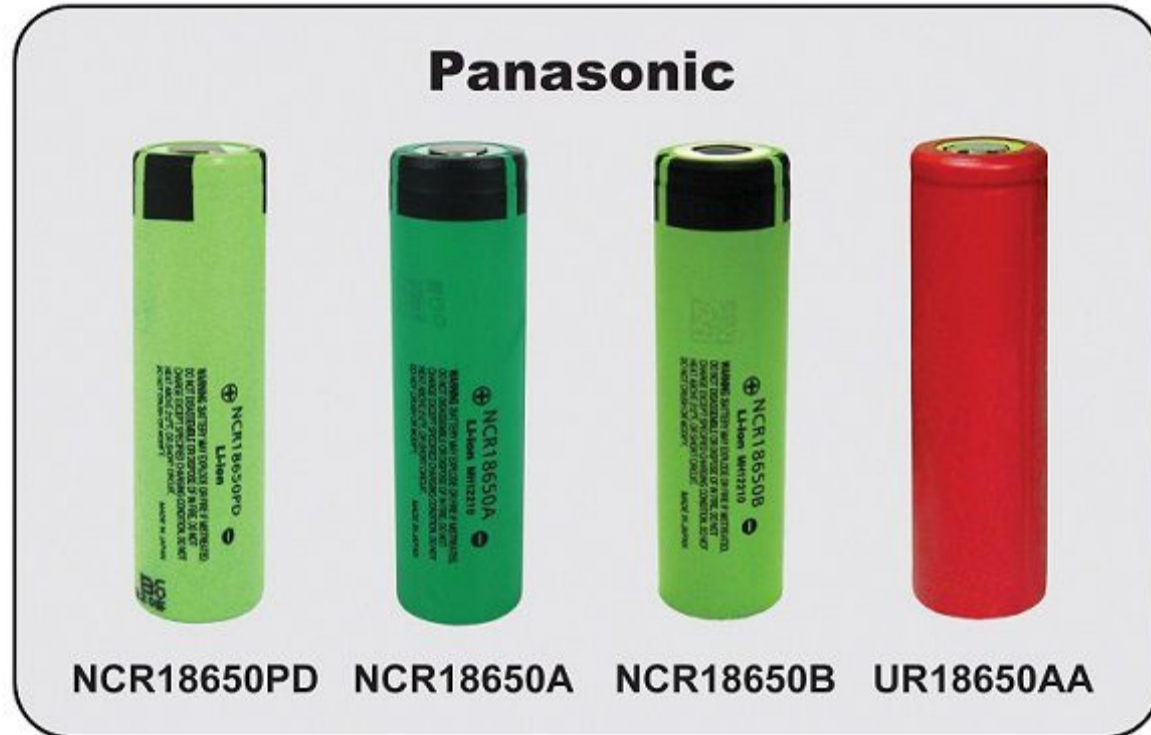
# BATTERY CELLS

Use high quality Japan, Korea and China battery cells for battery pack production.



# JAPAN & KOREA CELL

We are the Authorized Assembler of **Panasonic** and **Samsung** on high power consumption battery pack.



## Specifications

Brand		Panasonic				Samsung		
Model		NCR18650PD	NCR18650A	NCR18650B	UR18650AA	INR18650-15Q	ICR18650-22F	ICR18650-26F
Chemistry		Li-ion	Li-ion	Li-ion	Li-ion	Li-ion	Li-ion	Li-ion
Nominal Voltage		3.6V	3.6V	3.6V	3.6V	3.6V	3.6V	3.7V
Minimum Capacity		2750 mAh	2950 mAh	3250 mAh	2150 mAh	1450 mAh	2100 mAh	2550 mAh
Typical Capacity		2880 mAh	3070 mAh	3350 mAh	2250 mAh	1500 mAh	2200 mAh	2600 mAh
Internal Impedance		≤ 35 mΩ	≤ 100 mΩ	≤ 48 mΩ	≤ 100 mΩ	≤ 30 mΩ	≤ 100 mΩ	≤ 100 mΩ
Charge	Method	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *
	Voltage	4.2V	4.2V	4.2V	4.2V	4.2V	4.2V	4.2V
	Standard Current	0.54A	1.47A	1.62A	1.50A	0.75A	1.1A	0.52A
	Rapid Current	1.36A	1.47A	1.62A	1.50A	4A	2.2A	2.6A
Discharge	Cut-off Voltage	2.5V	2.5V	2.5V	2.57V	2.5V	2.75V	2.75V
	Continuous Current	10A	4.42A	4.87A	5A	18A	4.4A	5.2A
	Pulse Current (5 sec.)	18A	—	—	—	22A	—	7.8A
Dimensions	Diameter	Ø18.6 mm	Ø18.5 mm	Ø18.5 mm	Ø18.3 mm	Ø18.15 mm	Ø18.4 mm	Ø18.4 mm
	Height	65.2 mm	65.3 mm	65.3 mm	64.9 mm	64.6 mm	65 mm	65 mm
Approx. Weight		44.5g	46.5g	47.5g	42.2g	43g	44.5g	47g

\* CV/CC = Constant Voltage & Constant Current

Partnered with **YikLik Energy Limited (YLE)** battery cell manufacturer to successfully produce high-quality Li-ion and Li-polymer cells of LiCoO<sub>2</sub>, LiNMC, LiFePO<sub>4</sub> chemistries which are now being used in the making of battery packs for eBike, eMotorcycle, Electric Wheelchair, Electric Golf Cart, Car Starter Battery, UPS System, Lighting, Household Appliance, Remote Control Toys, and many others.

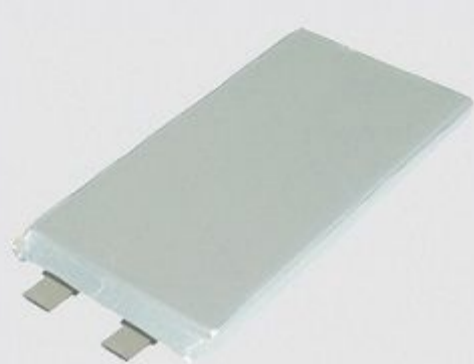


## Specifications

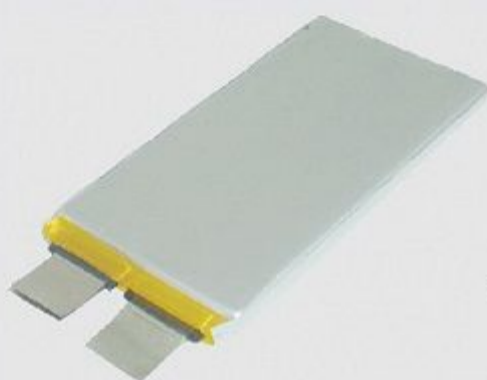
Brand		YLE					
Model		INR18650D150	INR18650A220	INR18650A245	INR18650A260	ICR18650D210	ICR18650A280
Chemistry		Li-NMC	Li-NMC	Li-NMC	Li-NMC	Li-Co	Li-Co
Nominal Voltage		3.6V	3.6V	3.6V	3.6V	3.7V	3.7V
Minimum Capacity		1400 mAh	2100 mAh	2400 mAh	2530 mAh	2000 mAh	2700 mAh
Typical Capacity		1500 mAh	2200 mAh	2450 mAh	2600 mAh	2100 mAh	2800 mAh
Internal Impedance		≤ 30 mΩ	≤ 65 mΩ	≤ 60 mΩ	≤ 60 mΩ	≤ 35 mΩ	≤ 65 mΩ
Charge	Method	CC/CV *	CC/CV *	CC/CV *	CC/CV *	CC/CV *	CC/CV *
	Voltage	4.2V	4.2V	4.2V	4.2V	4.2V	4.2V
	Standard Current	0.3A	0.44A	0.49A	0.52A	0.42A	0.56A
	Rapid Current	1.5A	1.76A	1.7A	1.8A	2.1A	2.24A
Discharge	Cut-off Voltage	3.0V	3.0V	3.0V	2.75V	3.0V	2.75V
	Continuous Current	15A	4.4A	4.9A	5.2A	10A	5.6A
	Pulse Current (5 sec.)	30A	6.6A	7.3A	7.8A	20A	8.4A
Dimensions	Diameter	Ø18.3 mm	Ø18.3 mm	Ø18.3 mm	Ø18.3 mm	Ø18.3 mm	Ø18.3 mm
	Height	65.2 mm	65.2 mm	65.2 mm	65.2 mm	65.2 mm	65.2 mm
Approx. Weight		43g	44g	47g	49g	43g	47g

\* CV/CC = Constant Voltage & Constant Current

## Li-polymer Battery Cells Series



INS6570138A500C



INS8570133A700D



INS0970165A900C



INS1170133A1000D

### Specifications

Brand		YLE			
Model		INS6570138A500C	INS8570133A700D	INS0970165A900C	INS1170133A1000D
Chemistry		Li-NMC	Li-NMC	Li-NMC	Li-NMC
Nominal Voltage		3.6V	3.6V	3.6V	3.6V
Minimum Capacity		4800 mAh	6800 mAh	8800 mAh	9500 mAh
Typical Capacity		5000 mAh	7000 mAh	9000 mAh	10000 mAh
Internal Impedance		≤ 15 mΩ	≤ 25 mΩ	≤ 30 mΩ	≤ 10 mΩ
Charge	Method	CV/CC *	CV/CC *	CV/CC *	CV/CC *
	Voltage	Max 4.2V	Max 4.2V	Max 4.2V	Max 4.2V
	Standard Current	1A	1.4A	1.8A	2A
	Rapid Current	5A	7A	9A	10A
Discharge	Cut-off Voltage	3.0V	2.5V	3.0V	2.5V
	Continuous Current	15A	35A	27A	50A
	Pulse Current (5 sec.)	50A	70A	90A	100A
Dimensions	Height	6.5 mm	8.5 mm	9 mm	11.3 mm
	Width	73 mm	71 mm	73 mm	71 mm
	Length	145 mm	135 mm	175 mm	135 mm
Approx. Weight		50g	160g	210g	215g

\* CV/CC = Constant Voltage & Constant Current

## Li-Fe Series Highly Reliable Battery Cells



IFR18650D110  
IFR18650D130



IFP335774S900



IFP287194S1000  
IFP287194S1300



IFP337194S1200  
IFP337194S1500

### Specifications

Brand		YLE						
Model		IFR18650D110	IFR18650D130	IFP335774S900	IFP287194S1000	IFP287194S1300	IFP337194S1200	IFP337194S1500
Chemistry		Li-Fe	Li-Fe	Li-Fe	Li-Fe	Li-Fe	Li-Fe	Li-Fe
Nominal Voltage		3.2V	3.2V	3.2V	3.2V	3.2V	3.2V	3.2V
Minimum Capacity		1000 mAh	1200 mAh	8500 mAh	9500 mAh	12000 mAh	11000 mAh	14000 mAh
Typical Capacity		1100 mAh	1300 mAh	9000 mAh	10000 mAh	13000 mAh	12000 mAh	15000 mAh
Internal Impedance		≤ 25 mΩ	≤ 50 mΩ	≤ 10 mΩ	≤ 10 mΩ	≤ 10 mΩ	≤ 12 mΩ	≤ 10 mΩ
Charge	Method	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *	CV/CC *
	Voltage	Max 3.70V	Max 3.70 V	Max 3.65V	Max 3.65V	Max 3.65V	Max 3.65V	Max 3.65V
	Standard Current	0.22A	0.26A	1.6A	2A	2.6A	2.4A	3A
	Rapid Current	1.1A	1.3A	8A	10A	13A	12A	15A
Discharge	Cut-off Voltage	2.0V	2.0V	2.0V	2.0V	2.0V	2.0V	2.0V
	Continuous Current	16.5A	3.9A	24A	50A *	39A	60A *	45A
	Pulse Current (5 sec.)	40A	13A	80A	100A	65A	120A	75A
Dimensions	Height	—	—	33 mm	28 mm	28 mm	33 mm	33 mm
	Width	Ø 18.3 mm	Ø 18.3 mm	57 mm	71 mm	71 mm	71 mm	71 mm
	Length	65.3 mm	65.2 mm	74 mm	94 mm	94 mm	94 mm	94 mm
Approx. Weight		42g	45g	350g	400g	410g	460g	480g

\* CV/CC = Constant Voltage & Constant Current

\* Recommend screw connect method if the constant discharge current is more than 30A