



## **ELECTRIC BICYCLES BATTERY TYPE**





**ODM Series - Water Bottle Battery Pack**



**Tube A: Ø 66 mm**

**24V**

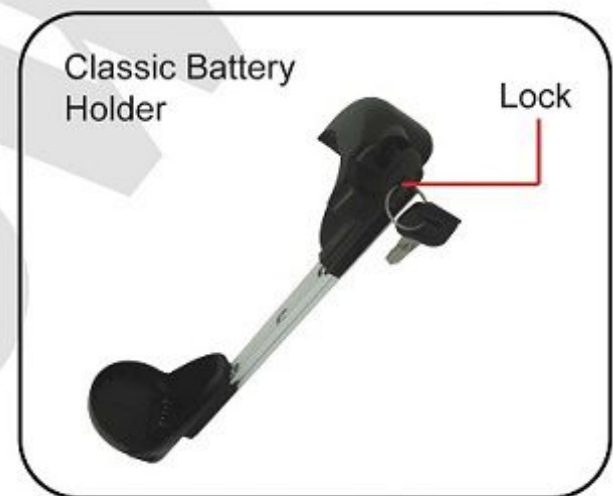
Mode No.: KL2430  
Configuration: 7S2P  
Normal Capacity: 4.4Ah - 6.8Ah  
Weight: 0.99 Kg  
Size: Ø 66 x 220H mm

**24V**

Mode No.: KL2431  
Configuration: 7S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 1.43 Kg  
Size: Ø 66 x 289H mm

**36V**

Mode No.: KL3631  
Configuration: 10S2P  
Normal Capacity: 4.4Ah - 6.8Ah  
Weight: 1.38 Kg  
Size: Ø 66 x 289H mm



**Tube B: Ø 81.5 mm**

**24V**

Mode No.: KL2426  
Configuration: 7S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 1.39 Kg  
Size: Ø 81.5 x 220H mm

**24V**

Mode No.: KL2427  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 1.81 Kg  
Size: Ø 81.5 x 289H mm

**36V**

Mode No.: KL3626  
Configuration: 10S2P  
Normal Capacity: 4.4Ah - 6.8Ah  
Weight: 1.33 Kg  
Size: Ø 81.5 x 220H mm

**36V**

Mode No.: KL3627  
Configuration: 10S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 1.76 Kg  
Size: Ø 81.5 x 289H mm

# ELECTRIC BICYCLES BATTERY TYPE



## ODM Series - Water Bottle Battery Pack



Tube C: Ø 92 mm

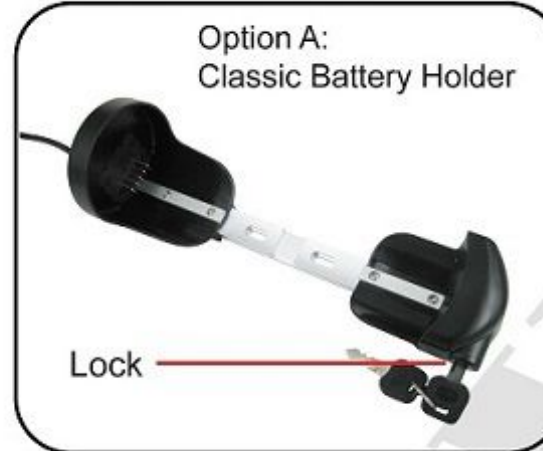
**24V**

Model No.: -----  
Configuration: 7S6P  
Normal Capacity: 13.2Ah - 20.4Ah  
Weight: ~2.75 Kg  
Size: Ø 91.8 x 289H mm

**36V**

Model No.: KL36H55  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: ~2.34 Kg  
Size: Ø 91.8 x 289H mm

• Two Battery Holder Types Available



▶ Fixed connection wire



▶ Removable connection wire



- ▷ *Compatible for KL3622*
- ▷ *Allow HDQ communication function*



Tube D: Ø 85 mm

**42V**

Mode No.: KL42H03  
Configuration: 12S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: ~2.21 Kg  
Size: Ø 85 x 285H mm



Slide-in



Battery Holder :  
Simple Slide-in Design

Lock



Track

Simple design for easy installation



# ELECTRIC BICYCLES BATTERY TYPE



## ODM Series - Multi-fit Battery Pack



### 24V

Model No.: KL2499  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 1.72 Kg  
Casing: ABS Plastic  
Size: 110L x 75W x 175H mm



### 36V

Model No.: KL3691  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.33 Kg  
Casing: ABS Plastic  
Size: 123L x 92W x 180H mm



### 36V

Model No.: KL3632  
Configuration: 10S3P  
Normal Capacity: 6.75Ah - 10.2Ah  
Weight: 1.88 Kg  
Casing: ABS Plastic  
Size: 110L x 75W x 213H mm



### 36V

Model No.: KL3699  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.4 Kg  
Casing: ABS Plastic  
Size: 110L x 75W x 245H mm



Features: Welding on any part of the bike frame



Connection options: Clipping & Welding



# ELECTRIC BICYCLES BATTERY TYPE



## ODM Series - Rear Carrier Battery Pack

### 24V

Model No.: KL2494  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 1.77 Kg  
Size: 148L x 56W x 249H mm

### 36V

Model No.: KL3692  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.4 Kg  
Size: 148L x 56W x 321H mm

ABS Plastic Case



KL2494

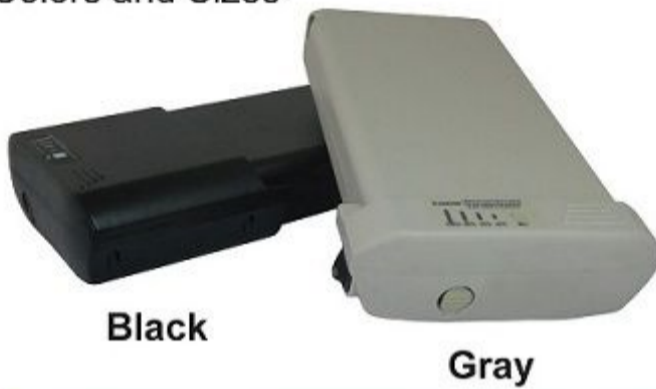


KL3692

### 36V

Model No.: KL3694  
Configuration: 10S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 1.85 Kg  
Size: 148L x 56W x 249H mm

Battery pack have different Colors and Sizes



Black

Gray



Customized Rear Light Version



Standard Version (without Rear Light)

• Available in Different Battery Bases

Standard  
245L x 148W x 60H mm  
(without controller space)



Option A  
294L x 148W x 74H mm  
(Small controller space)



Extra space for motor controller



Option B  
294L x 148W x 94H mm  
(Bigger controller space)



# ELECTRIC BICYCLES BATTERY TYPE



## ODM Series - Rear Carrier Battery Pack



### 24V

Model No.: KL2493  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.45 Kg  
Size: 151L x 53W x 291H mm

### 24V

Model No.: KL2495  
Configuration: 7S5P  
Normal Capacity: 11.0Ah - 17.0Ah  
Weight: 2.5 Kg  
Size: 151L x 53W x 365H mm

### 36V

Model No.: KL3661  
Configuration: 10S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 2.65 Kg  
Size: 151L x 53W x 365H mm

### 36V

Model No.: KL3693  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 3.05 Kg  
Size: 151L x 53W x 365H mm

### Aluminum Case



• Available in different Battery Bases



Standard  
Size: 150L x 60W x 53H mm



Option A  
Size: 150L x 143W x 53H mm



Option B  
Size: 150L x 107W x 79H mm



# ELECTRIC BICYCLES BATTERY TYPE



## ODM Series - Handy Carry Battery Pack

### 24V

Model No.: KL2497  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.0 Kg  
Size: 89L x 87W x 232H mm

### 36V

Model No.: KL3615  
Configuration: 10S5P  
Normal Capacity: 11.0Ah - 17.0Ah  
Weight: 3.25 Kg  
Size: 89L x 87W x 347H mm

### 36V

Model No.: KL3697  
Configuration: 10S3P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.66 Kg  
Size: 89L x 87W x 289H mm

### 48V

Model No.: KL4805  
Configuration: 13S5P  
Normal Capacity: 11.0Ah - 17.0Ah  
Weight: 4.09 Kg  
Size: 93L x 90W x 420H mm

### 48V

Model No.: KL4806  
Configuration: 13S6P  
Normal Capacity: 13.2Ah - 20.4Ah  
Weight: 4.69 Kg  
Size: 111L x 87W x 484H mm



### Features:

- Strong and Portable Casing - Aluminum Tube with ABS Plastic Cover
- Designed with Aluminum Rail and Battery Base Socket to ensure quick and proper battery installation



# ELECTRIC BICYCLES BATTERY TYPE



## Compatible Series - Handy Carry Battery Pack



**KLH24S65B.809**  
(7S5P, 24V/14.5Ah)

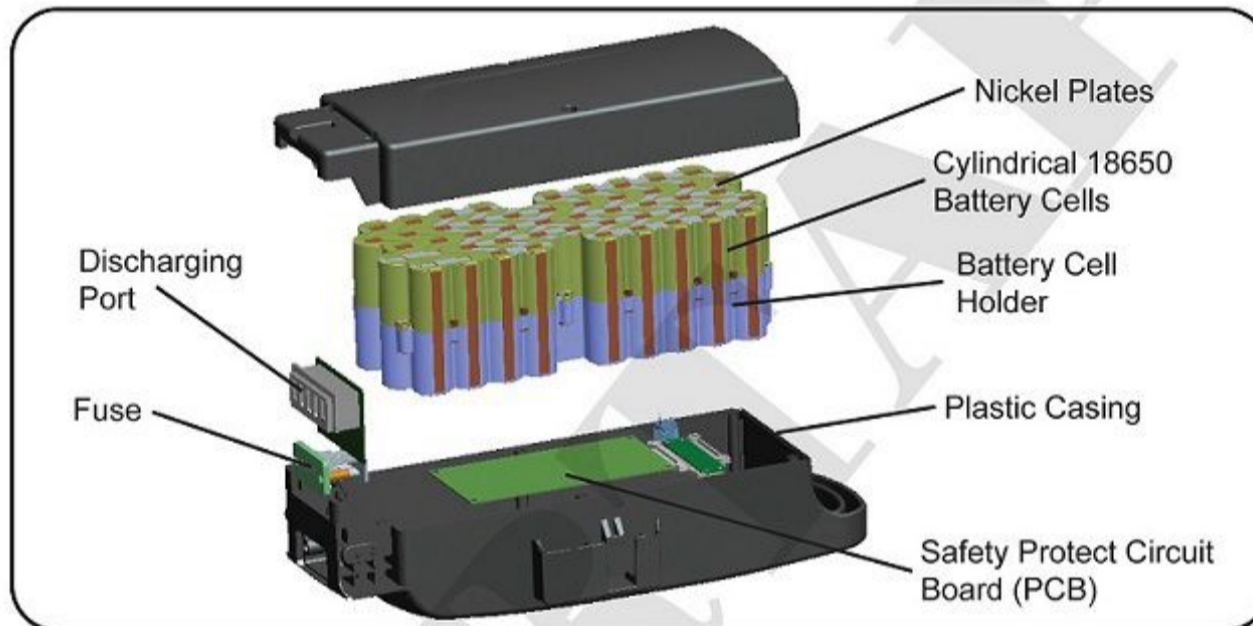


LED Indicator  
Charging Port

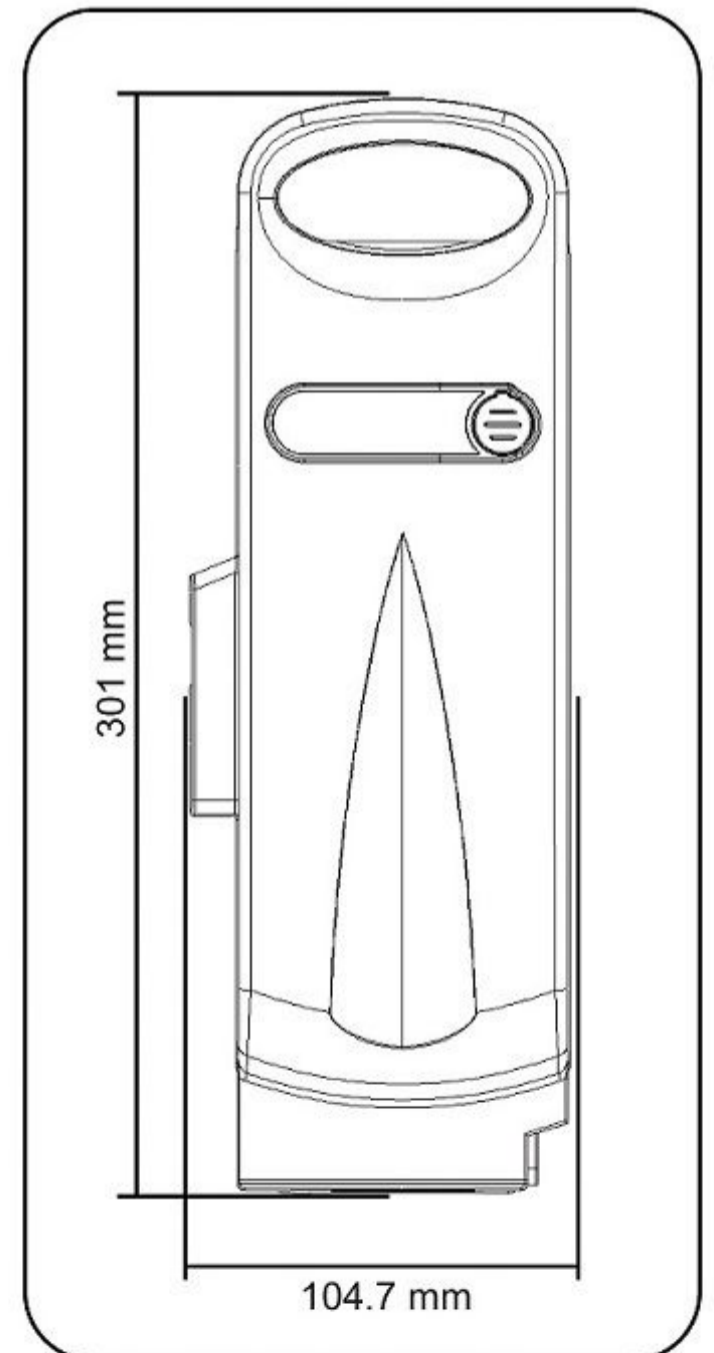


Fuse  
Discharging Port

### Exploded View Drawing



Nickel Plates  
Cylindrical 18650 Battery Cells  
Battery Cell Holder  
Plastic Casing  
Safety Protect Circuit Board (PCB)  
Discharging Port  
Fuse



301 mm

104.7 mm

### Specification

Model Code	KLH24S65B	KLH24S66B
Configuration	7S5P	7S4P
Voltage	24V	
Capacity	11.0Ah ~ 17.0Ah	8.8Ah ~ 13.6Ah
Dimension	301L x 104.7W mm	

### Other Available Configuration Specification

Configuration	7S3P	7S6P	7S7P
Voltage	24V		
Capacity	6.6Ah ~ 10.2Ah	13.2Ah ~ 20.4Ah	15.4Ah ~ 23.8Ah
Dimension	301L x 104.7W mm		



# ELECTRIC BICYCLES BATTERY TYPE



## Compatible Series Battery Pack



**Water Bottle Type**



Charging port with protective cover



LED Power Indicator



Battery Base

### 36V

Model No.: KL3645  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.53 Kg  
Size: Ø 96 x 312H mm

### 36V

Model No.: KL3622  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.53 Kg  
Size: Ø 96 x 325H mm



**Little Frog Type**

### 24V

Model No.: KL2407  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 1.82 Kg  
Size: 241L x 143W x 85H mm

### 36V

Model No.: KL3607  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.32 Kg  
Size: 241L x 143W x 85H mm

### 36V

Model No.: KL3643  
Configuration: 10S3P  
Normal Capacity: 6.6Ah - 10.2Ah  
Weight: 1.74 Kg  
Size: 241L x 143W x 85H mm



# ELECTRIC BICYCLES BATTERY TYPE



## Compatible Series Battery Pack

### Rear Carrier Type

#### 24V

Model No.: KL2408  
Configuration: 7S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.62 Kg  
Size: 397L x 150W x 76H mm

KL3618



#### 36V

Model No.: KL3617  
Configuration: 10S5P  
Normal Capacity: 11.0Ah - 17.0Ah  
Weight: 3.79 Kg  
Size: 410L x 151W x 66H mm

KL2408



#### 36V

Model No.: KL3618  
Configuration: 10S6P  
Normal Capacity: 13.2Ah - 20.4Ah  
Weight: 4.18 Kg  
Size: 410L x 151W x 66H mm



Aluminum Case



Charging port & Power Switch



Different Types of Discharging Port

#### 36V

Model No.: KL3608  
Configuration: 10S4P  
Normal Capacity: 8.8Ah - 13.6Ah  
Weight: 2.79 Kg  
Size: 90L x 92W x 385H mm

#### 36V

Model No.: KL3612  
Configuration: 10S7P  
Normal Capacity: 15.4Ah - 23.8Ah  
Weight: 4.8 Kg  
Size: 110L x 78W x 390H mm

# ELECTRIC BICYCLES BATTERY TYPE



## Li-ion Battery Pack Featuring Reliable Designs



A layer of waterproof plastic on Protection Circuit Board (PCB) Assembly

### 1. Intelligent Protection Circuit Module

- Cell Balancing
- Over Charge
- Over Discharge
- Over Current Protection
- Secondary Protection
- Temperature Protection

### 2. Water & Dust resistant of PCB Assembly

- A layer of waterproof plastic on Protection Circuit Board (PCB) Assembly prevents both water and dust from damaging PCB Assembly. Protection reaches IP65\* standard. The PCB is protected even battery is sank into water.

*IP 65 Water Proof	
IP	Ingress Protection (The IP number is composed of two numbers, the first referring to the protection against solid objects and the second against liquids. The higher the number, the better the protection.)
6	Totally protected against dust.
5	Water projected by a nozzle (6.3 mm) against enclosure from any direction shall have no harmful effects.

### 3. Built-in Gas Gauge IC

- The protection circuit board built-in Gas Gauge monitors battery status and enables data output to various accessories such as LCD panel. (Gas Gauge IC outputs data in HDQ format)

### 4. Automatic Sleep Mode:

Sleep mode shuts off automatically to prevent battery pack from discharging completely during prolonged storage or inactivity.

#### • Option A:

If the battery is activated for more than *16 hours\**, the battery circuit will automatically turn off the pack output.

#### • Option B:

If the battery is not used (under 4A output) for more than *16 hours\**, the battery circuit will automatically turn off the pack output.

\* Sleep mode activation time may adjust according to client's request.



# ELECTRIC BICYCLES BATTERY TYPE



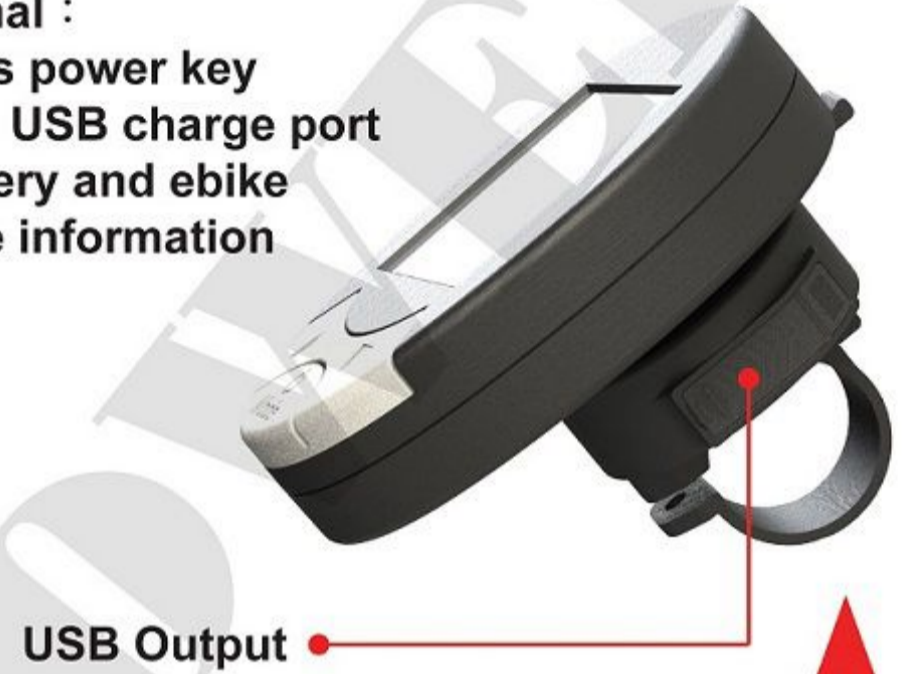
## Electric Bicycle Accessories - LCD Panel

### New Design • New Model



#### Features:

- Compact Size - easy to carry
- Multi Functional :
  - May serve as power key
  - Smartphone USB charge port
  - Display battery and ebike performance information



USB Output



**Current Speed**  
(in Km/h or MPH)



**Current Battery Capacity**



**Battery Fully Charged**



**Low Battery Alarm**  
(Battery status bar flashed)



**Battery Empty**



**Battery Error**



**Total Number of Cycles**



**Total Time of Trip**



**Total Trip of Distance**



**Estimated Range Available**  
(in Km/h or Miles)



**Torque Speed**



**Speed Selection**

#### Four different speed modes to choose:

- Eco: Energy saving scheme to provide gentle support while pedaling
- Tour: An optimal balance of comfortable riding experience and efficient power usage
- Sport: Deliver solid power for best performance
- Turbo: There is always time when extra speed is needed

# ELECTRIC BICYCLES BATTERY TYPE



## Electric Bicycle Accessories - LCD Panel



With the built-in fuel gauge, data and performance of the e-Bike battery, like power available, voltage, temperature and total number of cycles would be captured and shown on the LCD panel.

Current Speed (in Km/h or MPH)

Current Battery Capacity

Battery Fully Charged

Low Battery Alarm (Battery status bar flashed)

Battery Empty

Current Battery Voltage

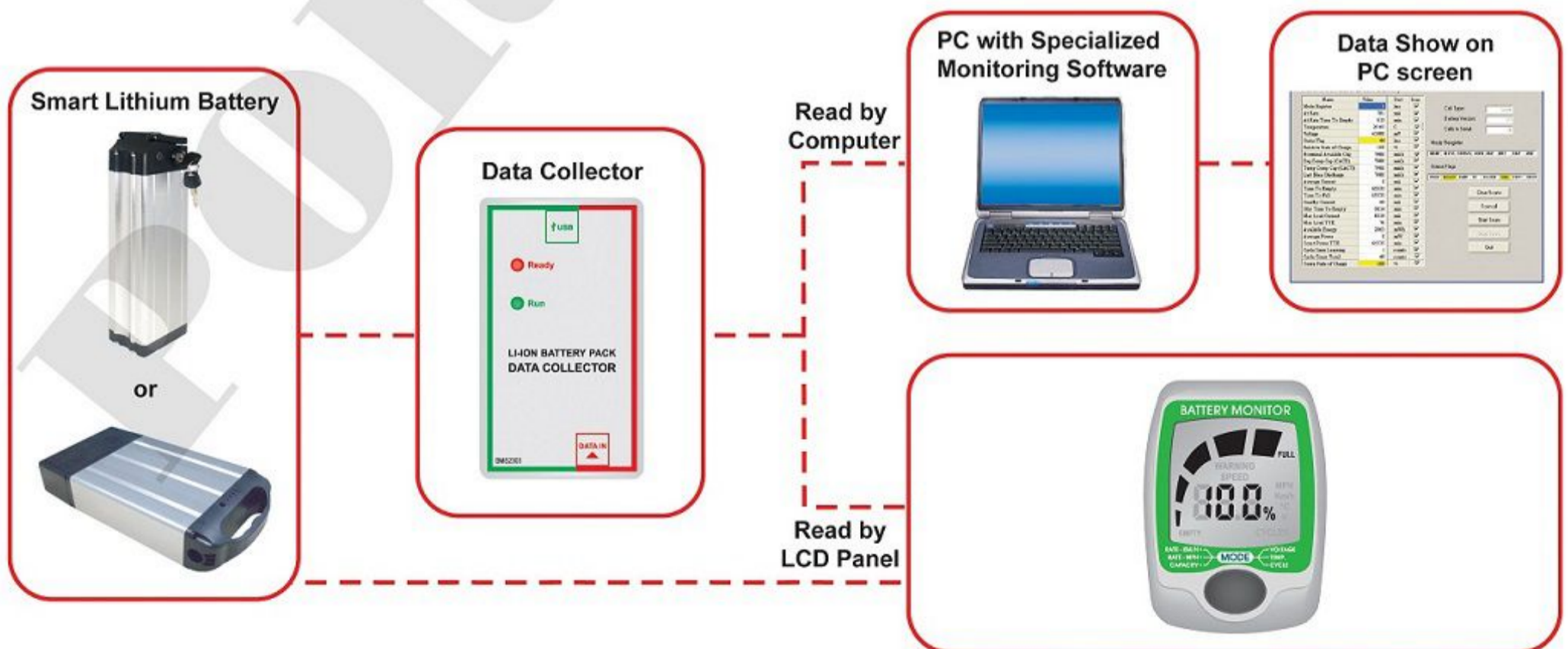
Current Battery Temperature

Total Number of Cycles

Battery Error

## Data Collecting System

Designed specifically for engineering test, user can collect the battery data with **LI-ION BATTERY DATA COLLECTOR** or **LCD PANEL** and all the battery data will show on the screen.



# ELECTRIC BICYCLES BATTERY TYPE



## Battery Discharge Current Specification

In order to choose a suitable battery for your vehicle at best, high discharge current is also available according to various specification in the market.

### High Discharge Current Version

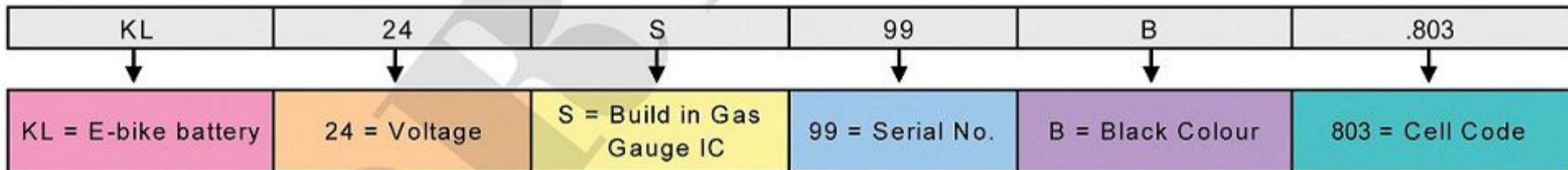
Fitting Product Model Code: KLHxxxx/KLHxxSxx/KLxxHxx/KLxxHSxx							
Cell Brand	Cell Model	Cell Code	Configuration	Capacity (Ah)	Maximum discharge current		
					continue	10mins	5s
Panasonic	UR18650AA	082	3P	6.75	10A	13A	18A
			4P or above	>8.7	15A	18A	35A
	NCR18650PD	809	2P	5.8	10A	13A	18A
			3P	8.7	13A	15A	25A
	NCR18650B	804	3P	10.2	10A	13A	18A
			4P or above	>10.2	15A	18A	35A
YLE	INR18650A220	083	3P	6.6	10A	13A	18A
			4P or above	≥ 8.8	15A	18A	35A
	ICR18650A240	085	3P	7.2	10A	13A	18A
			4P or above	≥ 9.6	15A	18A	35A
Samsung	ICR18650-22F	803	3P	6.6	10A	13A	18A
			4P or above	≥ 8.8	15A	18A	35A
	ICR18650-26F	806	3P	7.8	10A	13A	18A
			4P or above	>10.4	15A	18A	35A

**Remark:**

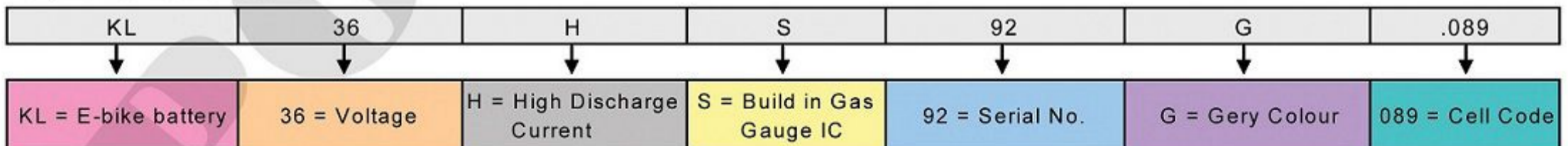
Maximum discharge current values subject to change. Please refer to their respective specification sheets for the most updated details.

### Extra Information: KL Product Model Code Structure

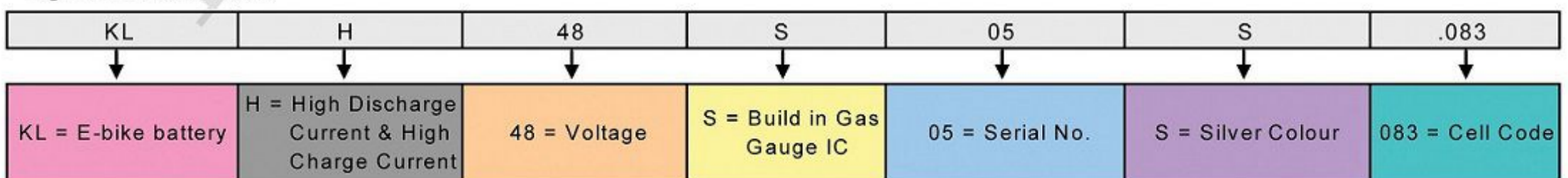
- Standard Discharge Current Version  
e.g. KL24S99B.803



- High Discharge Current Version  
e.g. KL36HS92G.089



- High Discharge & High Charge Current Version (uses 200W Charger)  
e.g. KLH48S05S.083

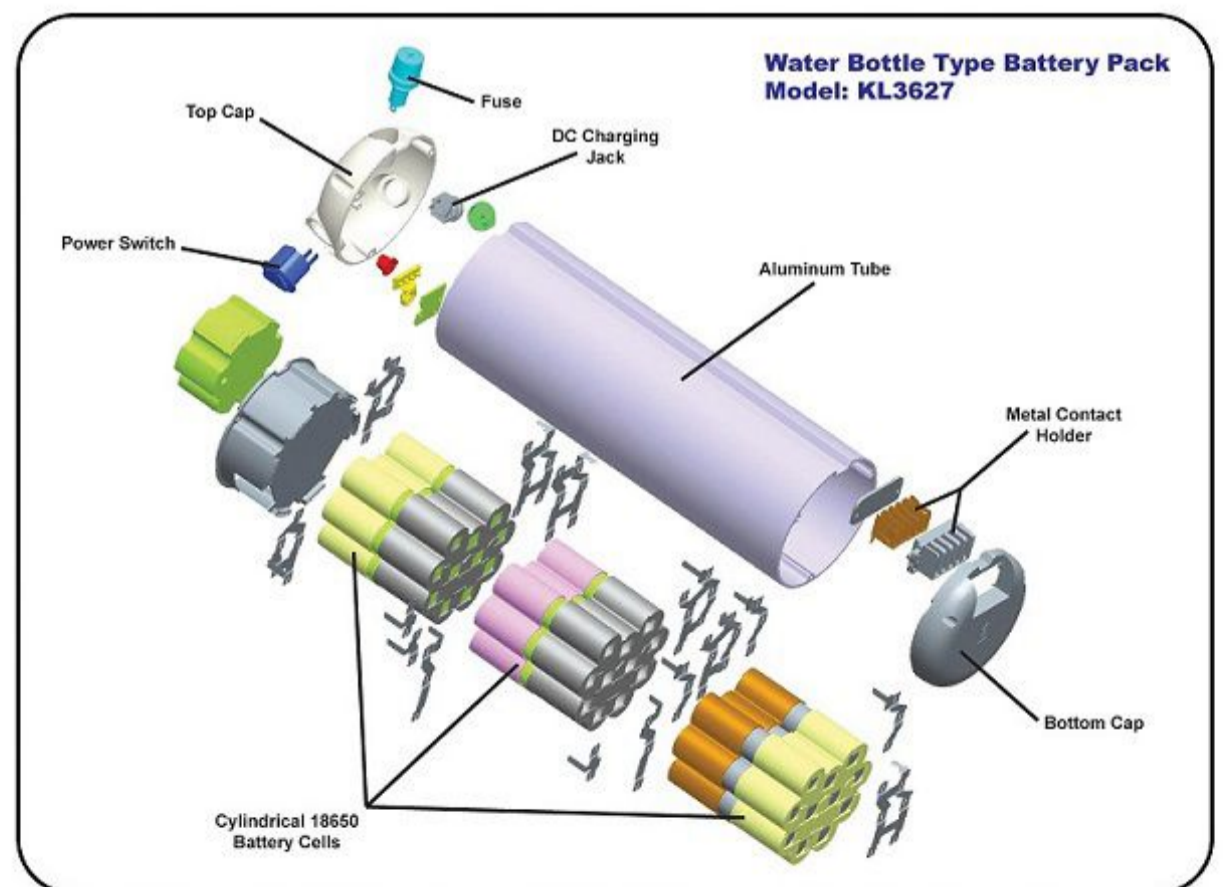
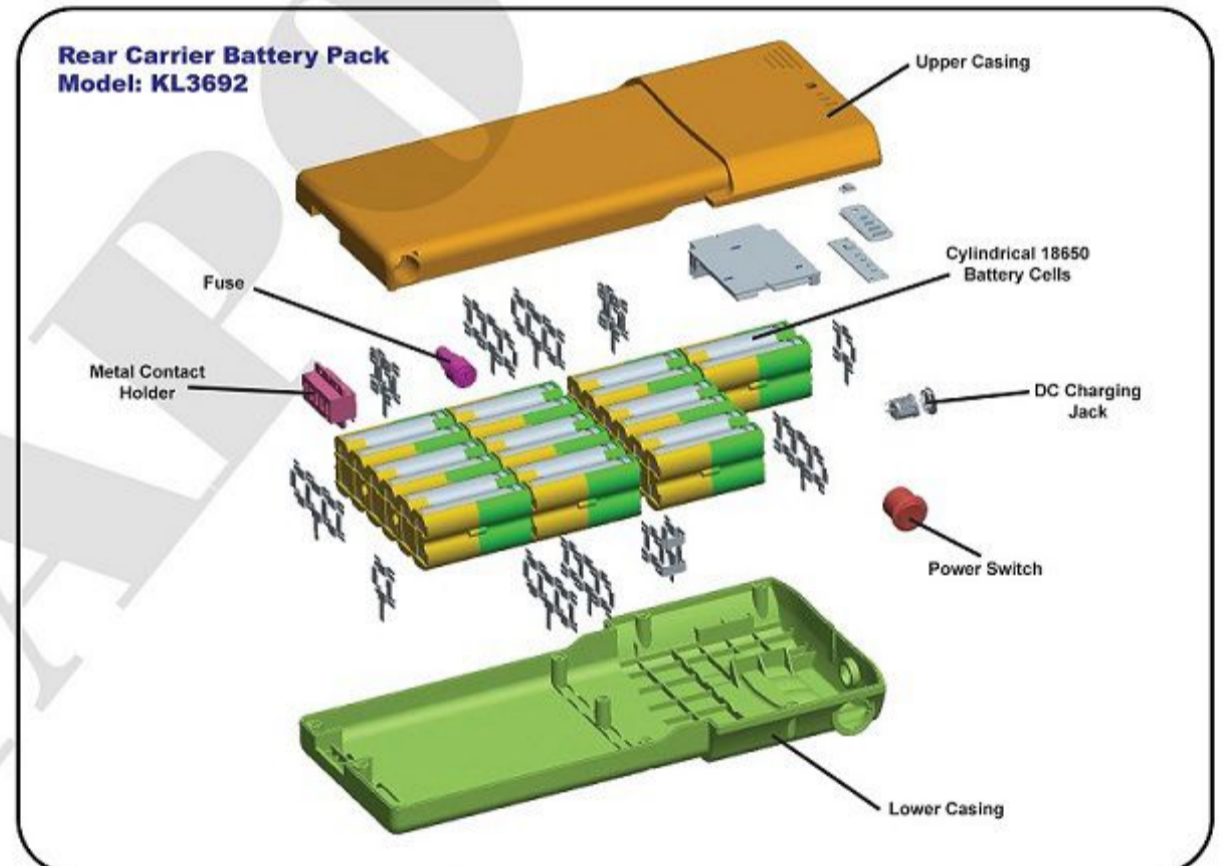
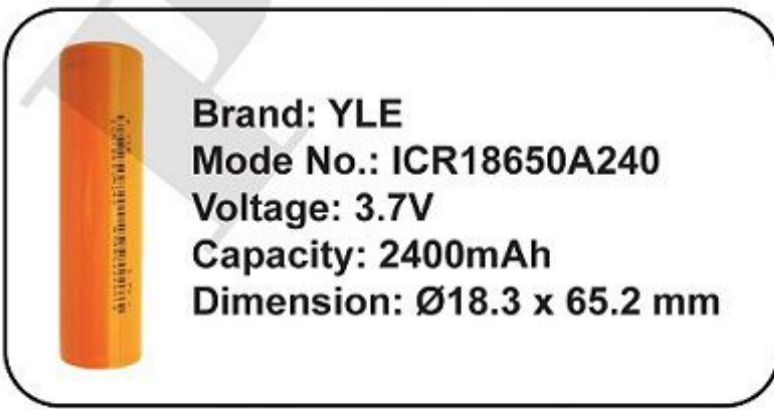
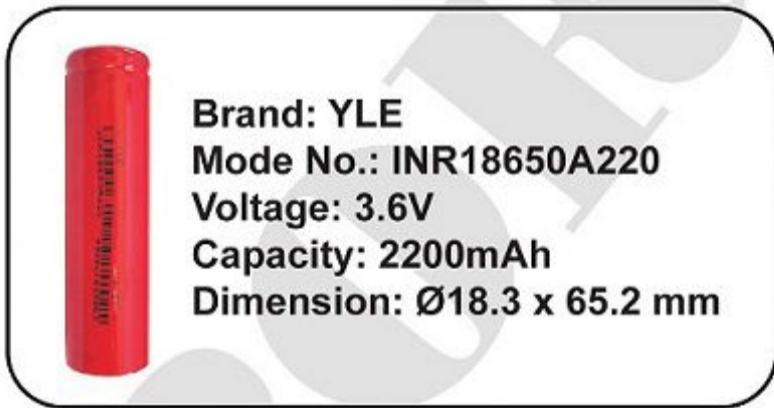
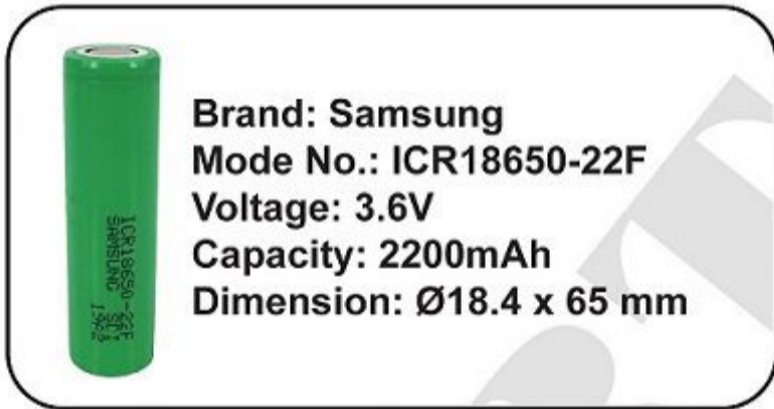
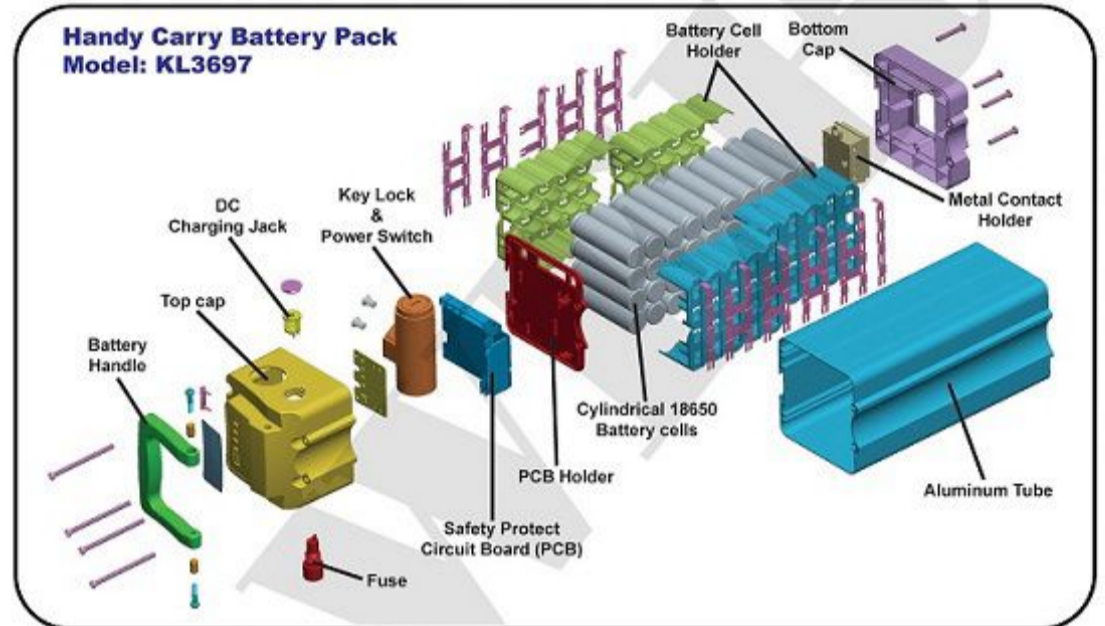
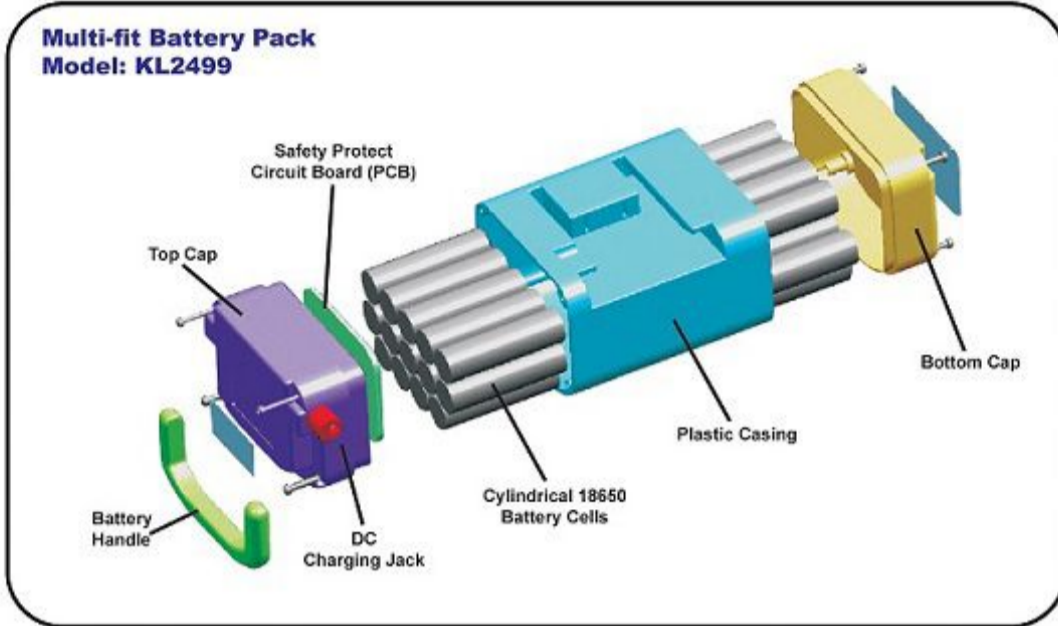


# ELECTRIC BICYCLES BATTERY TYPE



## Exploded View Drawing

### • Electric Bicycle Battery Built with Cylindrical Battery Cells



# ELECTRIC BICYCLES BATTERY TYPE



## Electric Bicycle Accessories - Battery Charger

### 60W Charger



Choice of 6 Different DC Output Plug Specifications



#### Specification

Model	ACK2804N	ACK4201N	C060L0701	C060L1001
Battery Voltage	24V	36V	24V	36V
AC Input	100-240V			
Frequency	47 - 63Hz			
DC Output	29.4V	42.0V	29.4V	42.0V
Charging Current	1.5A	1.35A	1.5A	1.35A
Power	Max.60W			
Dimension	115L x 58W x 31H mm			
Certification	CE, UL, GS, SAA & C-tick		CE, FCC	

### 100W Charger



Choice of 7 Different DC Output Plug Specifications



#### Specification

Model	CP100L0702	CP100L1002	CP100L1202	CP100L1302
Battery Voltage	24V	36V	42V	48V
AC Input	100-240V			
Frequency	47 - 63Hz			
DC Output	29.4V	42.0V	50.4V	54.6V
Charging Current	2.35A	2.2A	1.8A	1.8A
Power	Max.100W			
Dimension	170L x 65W x 38.5H mm			
Certification	CE, FCC			

Features: With Power Factor Correction Built-in

### 200W Charger



Choice of 3 Different DC Output Plug Specifications



#### Specification

Model	CP200F0807	CP200F1205	CP200F1604
Battery Voltage	24V	36V	48V
AC Input	100-240V		
Frequency	50 - 60Hz		
DC Output	29.4V	42.0V	54.6V
Charging Current	7A	5A	3.5A
Power	Max.200W		
Dimension	203L x 138W x 75.5H mm		
Certification	CE, FCC		

Features: With Power Factor Correction Built-in

### Choice of 7 Different AC Input Plug Specifications for Chargers :



Australian Type



British Type



European Type



Japan Type



American Type



Switzerland Type



Israel Type