



### **List of Approved Power-Assisted Bicycle (PAB) Models (as at 1 July 2023)**

1. LTA does not endorse either the PAB models or their retailers in this list. Consumers should make their own assessment based on their needs before purchasing the PABs from the retailers.
2. To meet LTA's technical requirements, retailers have worked with PAB manufacturers to produce the PABs without a start-up assistance feature.
3. The approval granted for PAB models is both retailer and model specific, and non-transferable. New applicants who wish to import identical PAB models in the list will be required to undergo fresh approval and sealing.
4. Consumers should only purchase PABs that are affixed with an orange seal bearing LTA's logo and a serialised number, as these PABs have been assessed to comply with LTA's technical requirements at the point of sealing.
5. Do not add/modify the PAB's battery and only use original batteries of approved specifications (listed below) recommended by the PAB manufacturer.
6. Consumers should only purchase and use original power adapters or chargers (supplied by the PAB manufacturer) that display an [ESG SAFETY Mark with a valid serial number](#).
7. For more information on PAB requirements, click [here](#).

<b>EN 15194:2017 Compliant PAB Models</b>	
<b>Make &amp; Model:</b> ALPS ETFT-S7DR	
<b>PAB Manufacturer:</b> Huanrui(Tianjin) Electric Vehicle Technology Co.,Ltd	
<b>Battery Model:</b> 366.8WY	
<b>Battery Manufacturer:</b> Guangdong Greenway Technology Co.,Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V 6.8Ah	
<b>Make &amp; Model:</b> AXIDE EC297	
<b>PAB Manufacturer:</b> Willing Ind.Co Ltd	
<b>Battery Model:</b> BT-E8035L	
<b>Battery Manufacturer:</b> Shimano	
<b>Battery Voltage &amp; Capacity:</b> 36V 14Ah	

<b>Make &amp; Model:</b> BROMPTON ELECTRIC MK.1	
<b>PAB Manufacturer:</b> Brompton Bicycle Ltd	
<b>Battery Model:</b> 10INR19/65-3	
<b>Battery Manufacturer:</b> BMZ Batterien-Montage-Zentrum GmbH Group	
<b>Battery Voltage &amp; Capacity:</b> 36.5V 8.55Ah	
<b>Make &amp; Model:</b> EXPRESS DRIVE	
<b>PAB Manufacturer:</b> Shenzhen Rongxinfa Lithium Electricity Technology Co., Ltd.	
<b>Battery Model:</b> HCI-SILVER FISHD24810.5	
<b>Battery Manufacturer:</b> Wanda Battery Intelligent Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 48V 10.5Ah	
<b>Make &amp; Model:</b> JI-MOVE MC	
<b>PAB Manufacturer:</b> Foshan Jidong Vehicle Industry Co., Ltd	
<b>Battery Model:</b> HCI-SILVER FISHD23621	
<b>Battery Manufacturer:</b> Jin Hua Heng Chuang New Energy Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 21Ah	

<b>Make &amp; Model:</b> JI-MOVE MC-PRO	
<b>PAB Manufacturer:</b> Foshan Jidong Vehicle Industry Co.Ltd	
<b>Battery Model:</b> HCI-001 D24819.2	
<b>Battery Manufacturer:</b> Jin Hua Heng Chuang New Energy Co.Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 19.2Ah	
<b>Make &amp; Model:</b> MAXIMALSG PAB-16-02	
<b>PAB Manufacturer:</b> Maximal Pte Ltd.	
<b>Battery Model:</b> LB-LG48V10AH / LB-LG4815-01	
<b>Battery Manufacturer:</b> Maximal Pte Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V (14.4Ah / 9.6Ah)	
<b>Make &amp; Model:</b> MAXIMALSG PAB-20-05	
<b>PAB Manufacturer:</b> Maximal Pte Ltd.	
<b>Battery Model:</b> LB-LG48V10AH / LB-LG4815-01	
<b>Battery Manufacturer:</b> Maximal Pte Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V (14.4Ah / 9.6Ah)	






<b>Make &amp; Model:</b> MAXIMALSG PAB-20-03 (Front Disk brake / Rear Disk Brake)	
<b>PAB Manufacturer:</b> Maximal Pte Ltd.	
<b>Battery Model:</b> LB-LG4815-01	
<b>Battery Manufacturer:</b> Maximal Pte Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 14.4Ah	
<b>Make &amp; Model:</b> MAXIMALSG PAB-20-03 (Front Disk brake / Rear V Brake)	
<b>PAB Manufacturer:</b> Maximal Pte Ltd.	
<b>Battery Model:</b> LB-LG4815-01	
<b>Battery Manufacturer:</b> Maximal Pte Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 14.4Ah	
<b>Make &amp; Model:</b> MAXIMAL SG PAB-20-04	
<b>PAB Manufacturer:</b> Maximal Pte Ltd.	
<b>Battery Model:</b> LB-EV4813-01	
<b>Battery Manufacturer:</b> Maximal Pte Ltd	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 12.8Ah	

<b>Make &amp; Model:</b> MIDO PRO	
<b>PAB Manufacturer:</b> YY Scooter Pte Ltd	
<b>Battery Model:</b> WDD36105X242	
<b>Battery Manufacturer:</b> Wanda Battery Intelligent Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 10.5Ah	
<b>Make &amp; Model:</b> MOBOT LEADER 2.0	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 48V15AH	
<b>Battery Manufacturer:</b> Dongguan Liushi Lithium Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 15Ah	
<b>Make &amp; Model:</b> MOBOT LEADER	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 48V14AH	
<b>Battery Manufacturer:</b> Dongguan Liushi Lithium Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 14Ah	


<b>Make &amp; Model:</b> MOBOT S3	
<b>PAB Manufacturer:</b> Dongguan Lehe Intelligent Technology Co. Ltd	
<b>Battery Model:</b> NZ0131004	
<b>Battery Manufacturer:</b> Guangdong Greenway Technology Co. Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V (10.4Ah / 11.6Ah)	
<b>Make &amp; Model:</b> MOBOT ORCA 3.0	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 48V20Ah	
<b>Battery Manufacturer:</b> Dongguan Liushi Lithium Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 20Ah	
<b>Make &amp; Model:</b> MOBOT ORCA	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 48V17.5AH	
<b>Battery Manufacturer:</b> Dongguan Liushi Lithium Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 17.5Ah	

<b>Make &amp; Model:</b> MOBOT ULTRA	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 48V25AH	
<b>Battery Manufacturer:</b> Dongguan Liushi Lithium Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 46.8V 25Ah	
<b>Make &amp; Model:</b> NAKXUS NF1	
<b>PAB Manufacturer:</b> Guangzhou Symbol Bicycle Co. Ltd.	
<b>Battery Model:</b> HA184	
<b>Battery Manufacturer:</b> Shen Zhen HANI Energy Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 8.7Ah	
<b>Make &amp; Model:</b> PEDELEC ROGI KING+	
<b>PAB Manufacturer:</b> EMK Vehicle (Kunshan) Co. Ltd	
<b>Battery Model:</b> RP-HB4824	
<b>Battery Manufacturer:</b> Ren Pu (suzhou)NewEnergy Technology Co.,Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 24Ah	




<b>Make &amp; Model:</b> PEDELEC ROGI MAX+	
<b>PAB Manufacturer:</b> EMK Vehicle (Kunshan) Co. Ltd	
<b>Battery Model:</b> WDD36210H002	
<b>Battery Manufacturer:</b> Wanda Battery Intelligent Technology (Kunshan) Co. Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V 21Ah	
<b>Make &amp; Model:</b> PEDELEC ROGI S+	
<b>PAB Manufacturer:</b> EMK Vehicle (Kunshan) Co. Ltd	
<b>Battery Model:</b> RP-HB4830	
<b>Battery Manufacturer:</b> Ren Pu (suzhou)NewEnergy Technology Co. Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 28.8Ah	
<b>Make &amp; Model:</b> VENOM 2+ 001Z	
<b>PAB Manufacturer:</b> Zhongxin Power (Tianjin) Bicycle Co. Ltd.	
<b>Battery Model:</b> O LONG 2Z	
<b>Battery Manufacturer:</b> Changxing Tianhong Lithium-ion Battery Technology Co Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 10Ah	



<b>Make &amp; Model:</b> VENOM 2 002Z	
<b>PAB Manufacturer:</b> Zhongxin Power (Tianjin) Bicycle Co. Ltd.	
<b>Battery Model:</b> O LONG 2Z	
<b>Battery Manufacturer:</b> Changxing Tianhong Lithium-ion Battery Technology Co Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 6Ah/10Ah	

EN 15194:2009+A1:2011 Compliant PAB Models	
<b>Make &amp; Model:</b> A2B KUO+	
<b>PAB Manufacturer:</b> Komda Industrial (S.Z.) Co., Ltd.	
<b>Battery Model:</b> G36928-BS22V3	
<b>Battery Manufacturer:</b> Dongguan Greenway Battery Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 9.0Ah	

<b>Make &amp; Model:</b> APOLLO MARS	
<b>PAB Manufacturer:</b> Zhejiang Apollo Motorcycle Manufacturer Co. Ltd.	
<b>Battery Model:</b> Mars	
<b>Battery Manufacturer:</b> LN Energy	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.8Ah	

<b>Make &amp; Model:</b> APOLLO SMART 1S	
<b>PAB Manufacturer:</b> Zhejiang Apollo Motorcycle Manufacturer Co. Ltd.	
<b>Battery Model:</b> Smart	
<b>Battery Manufacturer:</b> LN Energy	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.8Ah	
<b>Make &amp; Model:</b> APOLLO SMART 1S+	
<b>PAB Manufacturer:</b> Zhejiang Apollo Motorcycle Manufacturer Co. Ltd.	
<b>Battery Model:</b> Smart	
<b>Battery Manufacturer:</b> LN Energy	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.8Ah	
<b>Make &amp; Model:</b> BESV PS1	
<b>PAB Manufacturer:</b> Darfon Electronics Corporation	
<b>Battery Model:</b> -	
<b>Battery Manufacturer:</b> -	
<b>Battery Voltage &amp; Capacity:</b> -	

<b>Make &amp; Model:</b> DEUSVOLTS DV-X	
<b>PAB Manufacturer:</b> Kunshan Landon Trade Co., Ltd.	
<b>Battery Model:</b> T11CFH1WKL8A	
<b>Battery Manufacturer:</b> Winkind Tech CO.,LTD.	
<b>Battery Voltage &amp; Capacity:</b> 36V 7Ah	
<b>Make &amp; Model:</b> EXPRESS Y1+	
<b>PAB Manufacturer:</b> Shenzhen Chirrey Technology Co., Ltd	
<b>Battery Model:</b> Y1+ 10S4P	
<b>Battery Manufacturer:</b> Shenzhen Sinpow Electronics Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 14Ah	
<b>Make &amp; Model:</b> FREY R01	
<b>PAB Manufacturer:</b> Frey Vehicle Ltd.	
<b>Battery Model:</b> FREY 300	
<b>Battery Manufacturer:</b> Hangzhou Lin'an Beyond Power Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 6Ah	

<b>Make &amp; Model:</b> JI-MOVE LC	
<b>PAB Manufacturer:</b> Foshan JI-MOVE Information Technology Co. Ltd.	
<b>Battery Model:</b> XNDL-JD04	
<b>Battery Manufacturer:</b> Huizhou wellgo Technology Co., Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V 9.9Ah	
<b>Make &amp; Model:</b> JI-MOVE MC	
<b>PAB Manufacturer:</b> Foshan JI-MOVE Information Technology Co. Ltd.	
<b>Battery Model:</b> XNDL-JD03	
<b>Battery Manufacturer:</b> Shenzhen Xinneng Dynamic Power Co Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 20.8Ah	
<b>Make &amp; Model:</b> KERNAL AM-GT	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicle Co., Ltd.	
<b>Battery Model:</b> 13S5P	
<b>Battery Manufacturer:</b> Shenzhen Xi Pinzhi technology co. LTD	
<b>Battery Voltage &amp; Capacity:</b> 48V 17.5Ah	



<b>Make &amp; Model:</b> KERNEL ORCA	
<b>PAB Manufacturer:</b> Shenzhen Yijiao Electric Vehicles Co., Ltd.	
<b>Battery Model:</b> 13S4P	
<b>Battery Manufacturer:</b> Shenzhen Matrix Power Supply Technology Co., Ltd	
<b>Battery Voltage &amp; Capacity:</b> 48V 14Ah	
<b>Make &amp; Model:</b> MAXIMAL PAB-20-02	
<b>PAB Manufacturer:</b> Maximal Pte. Ltd.	
<b>Battery Model:</b> SINC-36V10AH	
<b>Battery Manufacturer:</b> Qinhuangdao Xinchu Photoelectricity Technology Co., LTD	
<b>Battery Voltage &amp; Capacity:</b> 36V 10Ah	
<b>Make &amp; Model:</b> MAXIMAL PAB-16-01	
<b>PAB Manufacturer:</b> Maximal Pte. Ltd.	
<b>Battery Model:</b> 36V10.4AH	
<b>Battery Manufacturer:</b> Yong Kang Hong Huang Gong Mao CO, LTD	
<b>Battery Voltage &amp; Capacity:</b> 36V 10.4Ah	

<b>Make &amp; Model:</b> MINIMOTORS SCORPION	
<b>PAB Manufacturer:</b> Shenzhen Concepts Wit Technology Co. Ltd.	
<b>Battery Model:</b> GNS6	
<b>Battery Manufacturer:</b> Shenzhen World Electronic Co., Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V 5.2Ah	
<b>Make &amp; Model:</b> MOBOT MINI 12"	
<b>PAB Manufacturer:</b> Tianjin Anbike Electric Bicycle Co. Ltd.	
<b>Battery Model:</b> VICTPOWER VICTA10S2P	
<b>Battery Manufacturer:</b> Shezhen Victpower Technology Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.6Ah	
<b>Make &amp; Model:</b> MOBOT MINI 16"	
<b>PAB Manufacturer:</b> Tianjin Anbike Electric Bicycle Co. Ltd.	
<b>Battery Model:</b> VICTPOWER VICTA10S2P	
<b>Battery Manufacturer:</b> Shezhen Victpower Technology Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.6Ah	

<b>Make &amp; Model:</b> MOBOT S1-1	
<b>PAB Manufacturer:</b> Dongguan Lehe Intelligent Technology Co., Ltd.	
<b>Battery Model:</b> 1. 36V 7.8AH 2. 36V 5.2AH	
<b>Battery Manufacturer:</b> Shenzhen Yima Power Supply Co., Ltd	
<b>Battery Voltage &amp; Capacity:</b> 1. 36V 7.8Ah 2. 36V 5.2Ah	
<b>Make &amp; Model:</b> OULLON E16-1	
<b>PAB Manufacturer:</b> Taicang Tianhu Industrial Co., Ltd	
<b>Battery Model:</b> RPALE-1	
<b>Battery Manufacturer:</b> Coppercell Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 7Ah	
<b>Make &amp; Model:</b> PAB-20-01	
<b>PAB Manufacturer:</b> Maximal Pte. Ltd.	
<b>Battery Model:</b> SINC-36V10AH	
<b>Battery Manufacturer:</b> Qinhuangdao Xinch Photoelectricity Technology Co., LTD	
<b>Battery Voltage &amp; Capacity:</b> 36V 10Ah	

<b>Make &amp; Model:</b> PEDELEC MIDO	
<b>PAB Manufacturer:</b> Guangzhou Symbol Bicycle Co. Ltd.	
<b>Battery Model:</b> HA184	
<b>Battery Manufacturer:</b> Shen Zhen HANI Energy Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 8.7Ah	
<b>Make &amp; Model:</b> PEDELEC ROGI	
<b>PAB Manufacturer:</b> Changzhou Daimyo Vehicle Co., LTD	
<b>Battery Model:</b> YIMA 36V7.5AH	
<b>Battery Manufacturer:</b> Changzhou Daimyo Vehicle Co., LTD	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.5Ah	
<b>Make &amp; Model:</b> PEDELEC ROGI MAX	
<b>PAB Manufacturer:</b> YY Scooter Pte Ltd	
<b>Battery Model:</b> 48V14ah	
<b>Battery Manufacturer:</b> Zhejiang Tianhong Lithium-Ion Battery Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 48V 14Ah	



<b>Make &amp; Model:</b> PEDELEC ROGI PRO	
<b>PAB Manufacturer:</b> YY Scooter Pte Ltd	
<b>Battery Model:</b> Li-Ion Battery, 48V14Ah	
<b>Battery Manufacturer:</b> ZheJiang Tianhong Lithium-Ion Battery CO.,LTD.	
<b>Battery Voltage &amp; Capacity:</b> 48V 14Ah	
<b>Make &amp; Model:</b> QUALISPORTS QSEB01-SG	
<b>PAB Manufacturer:</b> Changzhou Qualisports Technology Co., Ltd	
<b>Battery Model:</b> 10S2P/26PM	
<b>Battery Manufacturer:</b> Jiangsu Fuan Technology Co., Ltd	
<b>Battery Voltage &amp; Capacity:</b> 36V 5.2Ah	
<b>Make &amp; Model:</b> TORNADO AQUA	
<b>PAB Manufacturer:</b> Komda Industrial (Dongguan) Co. Ltd.	
<b>Battery Model:</b> LITHIUM-ION RECHARGEABLE BATTERY 36910	
<b>Battery Manufacturer:</b> Greenway Battery Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 9Ah	

<b>Make &amp; Model:</b> TSINOVA TS01	
<b>PAB Manufacturer:</b> Beijing Tsinova Technology Co. Ltd.	
<b>Battery Model:</b> TS-01 BATTERY	
<b>Battery Manufacturer:</b> Beijing Tsinova Technology Co. Ltd. & Panasonic	
<b>Battery Voltage &amp; Capacity:</b> 36V 5.8Ah	
<b>Make &amp; Model:</b> ULLMAX-MTB24	
<b>PAB Manufacturer:</b> EMK Vehicle (Kunshan) Co., Ltd	
<b>Battery Model:</b> 48V 7.5AH	
<b>Battery Manufacturer:</b> Yong Kang Hong Huang Gong Mao CO, LTD	
<b>Battery Voltage &amp; Capacity:</b> 48V 7.5Ah	
<b>Make &amp; Model:</b> VEEBIKE F7	
<b>PAB Manufacturer:</b> Hangzhou Top Mechanical and Electrical Technology Co., Ltd.	
<b>Battery Model:</b> SCIMTAR	
<b>Battery Manufacturer:</b> Zhejiang Changxing DWP Energy Technology Co., Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 7.5Ah	

<b>Make &amp; Model:</b> XILIDA TDN20QQ	
<b>PAB Manufacturer:</b> Shenzhen Rongxinfu Lithium Electricity Technology Co. Ltd.	
<b>Battery Model:</b> HC10S4P	
<b>Battery Manufacturer:</b> Shenzhen Heng Deli New Energy Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 8Ah	
<b>Make &amp; Model:</b> YUNMAKE TDM01Z	
<b>PAB Manufacturer:</b> Hangzhou Yunmake Technology Co. Ltd.	
<b>Battery Model:</b> C1 C-SERIES	
<b>Battery Manufacturer:</b> Hangzhou Yunmake Technology Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 5.1Ah	
<b>Make &amp; Model:</b> YUNMAKE TDN02Z	
<b>PAB Manufacturer:</b> Hangzhou Yunmake Technology Co. Ltd.	
<b>Battery Model:</b> C1 C-SERIES	
<b>Battery Manufacturer:</b> Hangzhou Yunmake Technology Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 5.1Ah	

<b>Make &amp; Model:</b> ZEBRA A5AH24	
<b>PAB Manufacturer:</b> Zhuhai Shuangye Electronic Technology Co. Ltd.	
<b>Battery Model:</b> 36V9AH	
<b>Battery Manufacturer:</b> Zhuhai Shuangye Electronic Technology Co. Ltd.	
<b>Battery Voltage &amp; Capacity:</b> 36V 9Ah	