# **Electric Vehicle perfectly shapes Smart Mobility and the development of IoT in HK**

由嶄新科技結集而成的純電動車,結合了智能科技、零排放、安全及 超卓性能於一身,以智慧出行的方式,完美地配合香港智慧城市的發展

### SHUN HING TECHNOLOGY CO., LTD.

信興科技有限公司

To cope with the development of electric vehicles (EV) in Hong Kong, Shun Hing Technology Co., Ltd. has provided professional and high-quality EV charging solutions since 2014.

Our team provides all-round product knowledge and practical experience to ensure excellent workmanship from start to completion of the installation work which include on-site sighting for evaluation, preparing quotations, electricity supply of pre-installation service, installation service, testing, maintenances and after-sales services.



為配合香港電動車的發展,信興科技有限公司自 2014 年起提供專業優質的電動車充電解決方案。

「信興電動車充電服務團隊」提供全面的一站式服務,包括:現場視察評估、專人與業主立案法團及物業管理部商討設立充電設施的具體方案、檢視電力供應及負荷、報價,以至進行供電系統前期工程、整項充電安裝工程、測試及保養等售後服務。

# Latest EV Technology Combination of Automotive x IoT

"Smart Mobility" is an important part of IoT and Smart City, which reflecting the change of technological development brings to transportation. Recently, the development of EV has further affected a revolution in Global Automotive Industry, combined with computer intelligent systems, to emerge in another milestone of technology.

Takes a well-known electric-automobile brand "Tesla" as an example. Right now, EV technology not only provides "GPS Positioning", "Real-time Traffic Conditions", but also jam- packed with technology, controlling through the Mobile App, "Keyless Driving", "Remote Starts & Unlock the Vehicle" and "Remotely Climate Control".

"Autopilot" system of EV is an advanced suite of active driver assistance, which regarded as the major function of future vehicle. Certain EV brands have been enabled this function years ago, which capable of controlling the throttle / brakes / steering / lane changes in certain situations. Through its wireless software update, continuously irons out bugs and introduces new capabilities.

The innovative IoT system can effectively make up for the human error from traditional manual driving, to deliver safe and comfortable driving operation, and enhance the efficiency on use of road.

Even more so, EV are equipped with high-performance driving

#### 最新的電動車科技 - 汽車 x 電腦智能系統的結合

「智慧出行」體現了物聯網及科技發展,對交通運輸帶來的改變。近年,電動車的發展趨勢更牽動了一場全球性的汽車革命, 透過汽車與電腦智能系統的結合,發展至科技的另一個里程碑。

以全球電動車領航者特斯拉為例,如今電動車科技不單能提供「GPS 汽車定位」、「實時交通」,更可透過手機程式「無匙駕駛」、「智能 遙控啟動及解鎖車輛 | 以及「遙控啟動溫度系統 | 。

電動車獨特的「自動輔助駕駛系統」亦被視為未來汽車的主要功能,個別電動車品牌早年已配置了此功能,車主可透過智能系統指令車輛在特定情況下自動輔助加速/煞車/轉向/換綫,並能通過無線軟件不時遙距更新車上各項功能。

透過創新的智能系統能有效地彌補傳統人手駕駛的不足,提供安全舒適的駕駛體驗,讓道路使用變得更有效率。

### Feature Articles • 專題文章



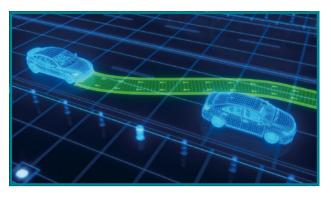
motors, takes recent hot EV "Model 3" as an example, it takes only 3.4 seconds to accelerate from standstill to 100 km/h, and a nominal range up to 560 km (WLTP).

Electric Vehicle is a transportation product crafted by IoT (Internet of Things), it presents the best use of green transportation technology that emerge in the Development of Smart City.

# Make Good use of Technology - Intelligent Charging

For most EV owners, the best way to charge EV is to install an AC Charger by a qualified electrician at home parking space for convenient, easy and a cost-effective charging access, plug in overnight when you get home, and wake up to a full charge every morning.

At the same time, in order to support EV on the road, according



此外,電動車具備高效驅動摩打,以近期熱賣的車型 Model 3 為例,車輛由靜止加速至時速每小時 100 公里只需 3.4 秒,更具備高達 560 公里的續航距離。

這個由創新物聯網系統打造出來的交通運輸產物,讓綠色運輸科技更好地配合智慧城市的發展。

#### 善用科技 — 智能充電系統

對於駕駛電動車的車主們,最好的充電方式是聘請合資格的工程公司,在家安裝交流充電器 (AC Charger),晚間在住宅為電動車充電,只需在回家後將座駕接上充電器,第二天一早汽車即充滿電,簡單方便之餘亦符合經濟效益。



### Feature Articles • 專題文章

to the latest information from the Environmental Protection Department (EPD), as of the end of Dec 2019, different EV operators have installed 2,929 EV-chargers for public usage, including 1,108 Medium and 588 Quick Chargers, widely available in different types of buildings throughout 18 districts of HK, you may find a Quick Charger in an average distance of 10 km.

In HK, by using a DC charger, installed by some EV operators, can speed up the charging process. Such as Tesla Supercharger, it can charge at a high-speed of 120kWh, which takes about 30 min to charge half of the vehicle's power, recharge for another 270 km.

In addition, through a dedicated mobile app, the owner can remotely know the real-time battery capacity, remaining battery life, nearby charging station location, and real-time usage of the charging station. Send a mobile phone message to notify the owner, so that the owners can better plan long and short journeys, enjoy worry-free driving fun, and more in line with the concept of smart travel.

與此同時,為了支援在路上的電動車,按環保署的最新資料,截至2019 年 12 月底,現時全港各營運商已在本港各處設置了 2,929 個充電器供公眾使用,包括 1,108 個中速充電器及 588 個快速充電器,廣泛分佈在全港十八區不同類型樓宇內,平均約 10 公里的範圍之內便可找到一個快速充電設施。

由部分營運商在本港裝設的直流快速充電器 (DC charger) 更可迅速地完成充電程序,以特斯拉的超級充電器 (Supercharger) 為例,能以高達 120kWh 的速度進行充電,約 30 分鐘補充車輛一半的電量,足夠再行駛超過 270 公里。

此外,透過專用的手機應用程式,車主可以遙距知悉電動車實時的電池容量、剩餘續航距離、鄰近充電站位置以及充電站實時的使用情況等,智能充電系統更會於完成充電後,自動發出手機訊息通知車主,讓車主們能更好地計劃長短途旅程,享受無憂的駕駛樂趣,而且更符合智慧出行的理念。



#### **Extension of EV – Green Energy Storage System**

With the limited life cycle of products, some electric vehicle manufacturers have made better use of retired batteries for electric vehicles, launched scalable power generation and storage products for clean energy, and developed a Power Pack. Emissions to optimize human living space in the future.



### 電動車科技的延伸 - 潔淨能源儲存系統

随著產品有限的生命週期,有電動車生產商已更進一步地善用電動車的退役電池,推出規模可擴展的潔淨能源發電及儲存產品 Power Pack,循智慧城市的可持續發展設想,實現零排放,優化人類未來的生活空間。

