ignion | FLOOX by Premium PSU

Your innovation.
Accelerated.

CHARGING STATIONS

Ignion components deliver reliable wireless connectivity to charging points for electric vehicles

THE COMPANY

Floox by Premium PSU.

Driven by a strong belief in the importance of transitioning to electric mobility solutions, Premium PSU, a leading power electronics company, has unveiled FLOOX by premium PSU. This new brand is dedicated to designing, developing, and manufacturing fast and ultra-fast direct current in (DC) charging stations for electric vehicles (EVs). Starting in 2024 Floox will introduce the Lyra 60 a compact 60 kW charging station that is set to revolutionize the market. The Lyra 60 can charge a typical car battery to 80% capacity in just 30 to 42 minutes. These charging stations are not limited to gas stations but are also designed for everyday locations like supermarkets gyms and restaurants where people frequently make short stops.

THE CHALLENGE

Incorporating Reliable Connectivity in a Metal Box

Floox faced the challenge of ensuring reliable and robust Bluetooth and mobile connectivity for their Lyra 60 EV charging stations. This was essential to guarantee a seamless payment process with no hiccups minimize delays and prevent customer frustration. Additionally, they needed remote monitoring and configuration capabilities to ensure the stations' optimal performance. Providing status information to end users and charging station operators was another crucial requirement.

Floox´s engineers and designers knew that they didn´t want a vulnerable external antenna which would be prone to physical damage and require frequent maintenance.

However, the vision of a sleek all-metal design for the charging station´s chassis would make getting adequate antenna performance from the interior of the design a challenge.

In Ignion's suite of products and Antenna Intelligence Cloud™ design tool, Floox discovered a wireless connectivity solution tailored to their specific needs. Ignion's readily available off-the-shelf products offered an ideal fit. Leveraging Antenna Intelligence Cloud™ Floox swiftly received design suggestions aligned with their charging stations' characteristics and requirements. This valuable information enabled them to avoid a protracted prototyping process. Ultimately, they achieved the necessary connectivity while maintaining the desired aesthetics of their product. This was made possible by integrating Ignion's mXTEND™ components and incorporating a discrete plastic panel on the exterior of the charging station to optimize antenna performance.

THE SOLUTION

Floox with Virtual Antenna® technology powering a change in the mobility paradigm.

In 2024 and beyond Floox has ambitious plans to introduce even faster DC charging stations, simplifying the transition to electric vehicles and making them more attractive to consumers and to establishments that cater to the growing demand for vehicle charging options. Floox believes that fast and super-fast charging stations will redefine convenience for EV users. Charging won't be confined to traditional gas and service stations or slow home charging but will also be seamlessly integrated into daily activities like morning workouts at the gym grocery shopping or attending concerts.
Floox intends to continue partnering with Ignion in their future projects, to ensure their charging stations consistently deliver essential information to users and operators. This commitment guarantees hassle free access to available charging stations and enables operators to monitor and maintain optimal performance minimizing downtime.

"Ignion's solutions fit perfectly in our needs, we will be relying on Ignion's robust technology to revolutionize the mobility paradigm"...

Martí Salvador, Engineering Manager

In summary Floox in collaboration with Ignion's innovative solutions is poised to drive the future of electric vehicle charging making it more accessible convenient and efficient than ever before.