

Protected

Case Study: Empire Electrical

Featuring: **EATON** **BATTERY CSB**



Ensuring Your Viewing Pleasure

As kiwis got ready to cheer for Emirates Team New Zealand's "Te Rehutai" boat in the 36th America's Cup, we were excited to be a part of the event beyond willing our team to victory.

Partnering with Auckland based electrical company, Empire Electrical, UPS Power Solutions were commissioned to deliver a back-up power solution for international media operations at the America's Cup base on Hamer Street in central Auckland.

Oliver Crawshay, Empire Electrical's Managing Director, required a solution that could deliver 100 KW of power to the event's sophisticated broadcast and graphics equipment for 10 minutes.

This would provide enough clean, consistent power to keep all broadcast equipment operating in the event of an outage or interruption.

"With an event of this magnitude, with the whole world watching, we needed to be 100% certain of a clean and uninterrupted power supply and sufficient power redundancy," says Crawshay.

Empire Electrical was responsible for all electrical work and power management for the America's Cup's sizable base of operations.

The company specialises in delivering electrical services of this nature, having previously been the primary electrical contractors for Auckland's Lantern Festival, Boat Show and Diwali Festival as well as major concerts for international and local performers such as Queen and Six60.

"Our strategy for the international broadcast operation involved commissioning a 20-foot container with a custom-designed back-up

power supply to deliver consistent, clean power and ensure a smooth transition to our generators if needed," says Crawshay.

UPS Power Solution's Senior Engineer, Sam Lingman managed the design and commissioning of the solution as well as hiring and managing transportation of the container.

He says it was exciting to manage a project that protects the sensitive media equipment enabling people around the world to watch and enjoy the racing.

The container was delivered to UPS Power Solution's Penrose facility in November 2020 and would be the home of a 160 kVA Eaton 3-phase UPS along with two strings of CSB HRL 280W batteries and four heavy-duty air-conditioning units for up to six months.

"The Eaton UPS easily exceeds the 100 KW for ten minutes requirements as proved by load bank testing. The CSB batteries are best-in-class for this type of application and the air-conditioning units maintain a constant temperature of 20°C, ensuring perfect environmental conditions given that the container will be sitting in the sun for weeks," says Lingman.

The solution also performs more than just back-up power, with the Eaton UPS tackling the power disruption that can arise from being located in an industrial area and delivering reliable, clean power.

"We're delighted to have been involved in deploying this solution and then enjoying the America's Cup as fans. Though there were interruptions to the race schedule, we're pleased that there were no interruptions to broadcasting" says Lingman.