



HIGH-POWER ELECTRIC VEHICLE BATTERY INTEGRATED CHARGING SOLUTION

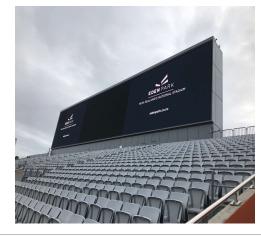
### INTRODUCTION

## LPINZ-PRODUCTS AND SERVICES OVERVIEW

- Major projects LPINZ were involved
  - EV Chargers for Auckland Transport, 150kW DC fast chargers
  - Sky Tower Lightning Protection
  - EDEN Park Stadium Power Quality Solution
  - And Many More...
- Offered Solutions,
  - Power Quality Solutions
  - EV Charging Solutions
  - UPS solutions
  - Earthing Solutions
  - MV and HV Solutions
  - Lightning Protection Solutions











### EV MARKET AND CHARGING INFRASTRUCTURE

#### EV Market in NZ

- EVs have increased from 27k to 78k in the last 4 years
- Around 1200 public chargers In NZ up to date
- One charger for every 59 EVs
- Global Benchmark to have 10 EVs per public charge point

# Challenges in Charging Infrastructure

- Unstable Power sources in Rural areas
- High Power requirement for DC charging
- Lack of spare capacity for DC charging infrastructure





### INTRODUCTION TO BATTERY POWERED EV CHARGERS

# What Is a Battery-Powered EV Charger?

- A self-contained charging solution that integrates a high-capacity battery, allowing it to operate independently of the power grid availability.
- Provides a portable, on-demand energy source for charging electric vehicles wherever needed.

# Why Battery-Powered Chargers?

- To establish High Power chargers where electrical connections are not stable (remote areas)
- To have high-power chargers where electrical capacity(MAXIMUM DEMAND) is limited. Supermarkets are just one example.
- Grid upgrades are very costly or sometime not possible



## LPINZ-ELUMINA ULTRA FAST CHARGING SOLUTION

#### ALL IN ONE ULTRA FAST D1 CHARGER

#### OUTPUT

- Maximum output Power 204kW
- Number of Charge Ports 2 (CCS2, CHAdeMO)
- Max Power Per DC Gun 160kW(Customizable)

#### INPUT

- AC supplementary Power 40kW
- AC voltage 400Vac
- Rated Input Current 63A

## Energy Storage

- Energy Chemistry Lithium Ion (LFP)
- Energy Storage Capacity 193kWh
- Battery Cooling/Heating Liquid Cooling

#### Network

- Network Connection 4G LTE, Ethernet
- Communication OCPP 1.6
- POS Payment Credit card & Debit card





## LPINZ-ELUMINA ULTRA FAST CHARGING SOLUTION

#### ALL IN ONE ULTRA FAST D1 CHARGER

#### Additional Features

- 43" Display for additional revenue opportunities
- Portable: move to a new location using forklift/crane
- · Can be powered through an Aero Plug / Aviation Plug (Mennekes)
- Can be wrapped/decaled to your own designs

## Key Locations of implementation

- Supermarkets
- EV fleet-managed institutes
- Remote areas with unreliable power supplies (Along state Highways)
- Fuel Stations
- Public parking locations







THANK YOU FOR YOUR INTEREST.

FOR FURTHER INFORMATION ABOUT THIS PRESENTATION,
PLEASE CONTACT:

GORDAN LUETICH +64 27 283 5749 | gordan@lpinz.co.nz

Unit 4 A/B, Building 1, 206 Swanson Rd, Henderson Auckland 0610 PO Box 21872, Henderson Auckland 0650 (09) 833 5749 | info@lpinz.co.nz | lpinz.co.nz