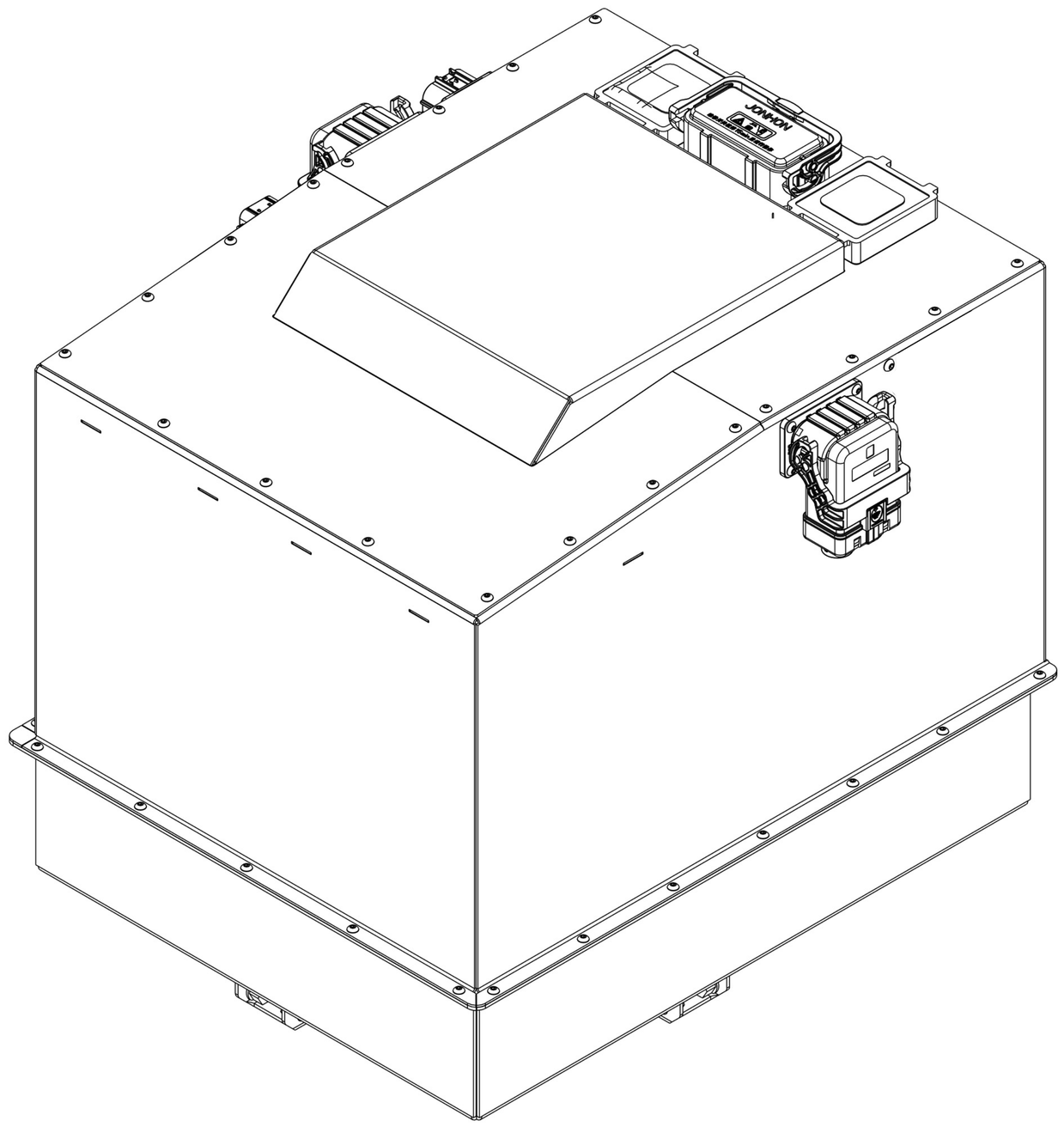
POWER UNDER THE HOOD (OR BONNET)

Engine bay battery system with built in CCS charging, advanced thermal management and sustained power delivery to get your electric conversion on the road. Fast.



FL10 UBP55E

Universal Battery Pack 55kWh

CAPACITY	NOMINAL VOLTAGE	PEAK DISCHARGE	CCS CHARGE RATE	PROTECTION	WEIGHT
55kWh	350v	330kW	70kW	IP67	320kg
			SOFTWARE LIMITED		

Fits in (almost) anything

Compact, high density battery pack to fit under the hood of most larger classic vehicles including 4x4s, muscle cars, trucks and bigger Euro sports cars. Land Rover Series and Defender, Bronco, Mustang, Monaro, Landcruiser and more.

Fast Input, Big Output

55kWh gives up to 300km of range with recharge in under an hour via CCS DC charging. Built in contactor control, pre-charge, battery management and safety systems.
3 x 25A auxiliary outputs for HVAC and other systems. Bolt or weld in, add cooling and 12v ignition.

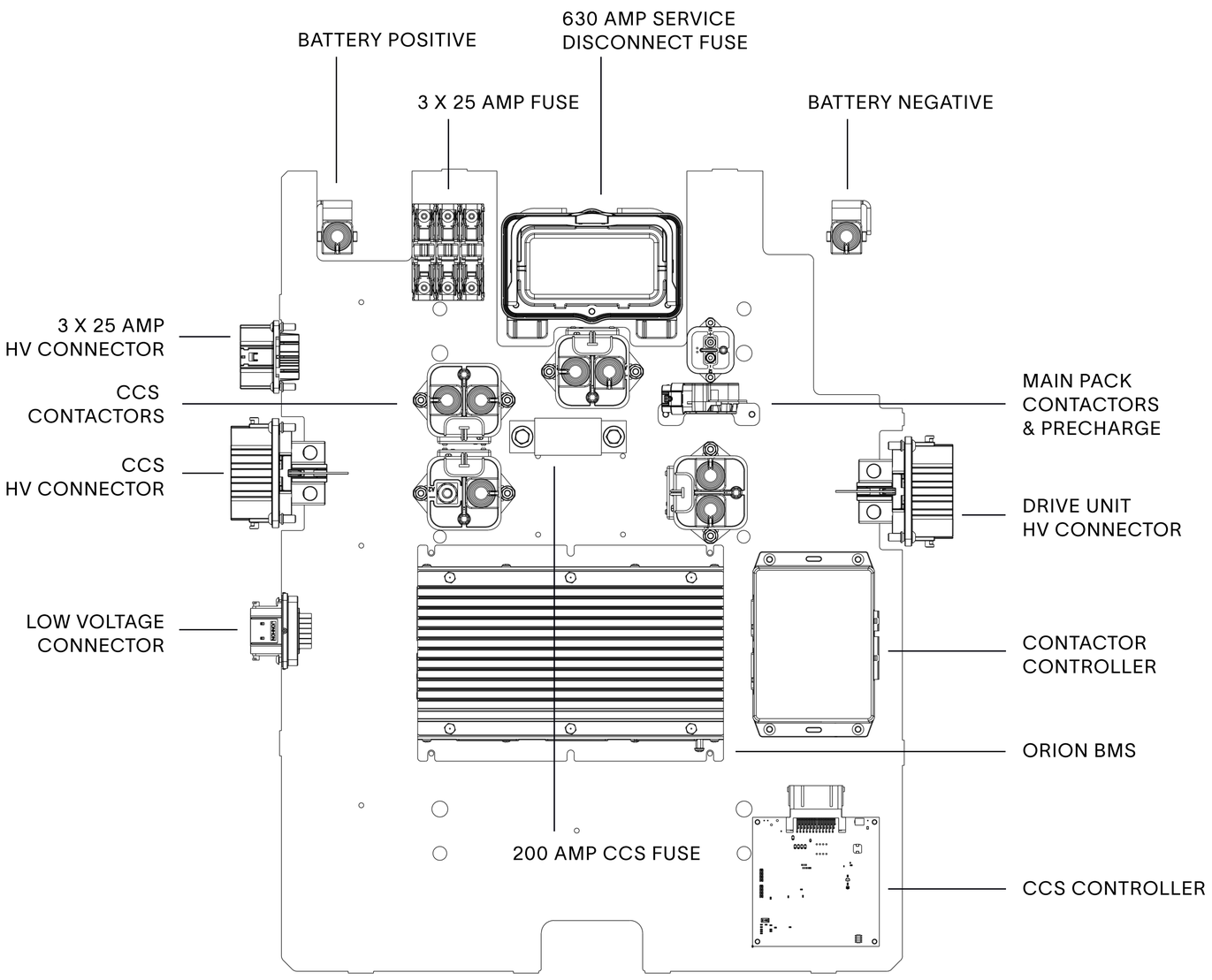
Just Add Motor

Nominal 350 volts and 330kW peak output mean sustained energy for the most popular and powerful motors including; Zonic, Tesla, Cascadia Motion, and Arrival Elements.
Transmission tunnel or rear mounting of motor required.

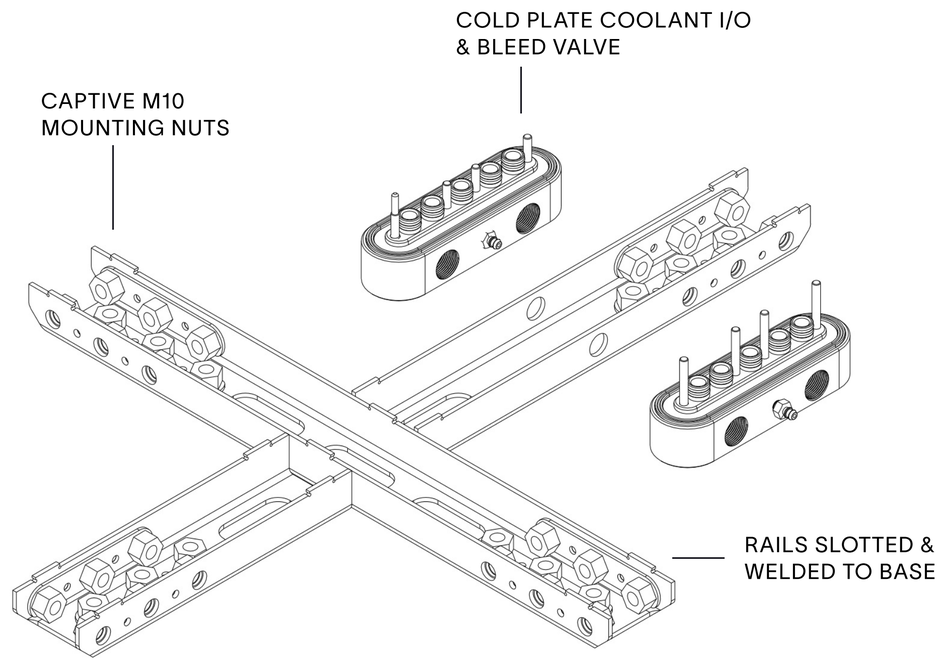
SPECIFICATIONS

ELECTRICAL	Capacity	55 kWh	MECHANICAL	Main Dimensions	526W x 652D x 588H mm
	Nominal Voltage	350 volts		Weight	320 kg
	Max Voltage	403 volts		Enclosure Materials	Steel and Carbon Fibre
	Max Charge Voltage	393 volts			
	Min Voltage	307 volts	ENVIRONMENTAL	Thermal Management	Aluminium Cold Plates
	Min Voltage Under Load	268 volts		Coolant Requirements	50% Glycol / 50% Water
	CCS Charging Rate	70 kW		Operational Temp	-10c to 55c
	Main Fuse	1 x 630 amp		Stationary Temp	-20c to 65c
	Auxilary HV Outputs	3 x 25 amp			
	Continuous Discharge	55 kW	OTHER	Battery Chemistry	NCM712
	Discharge 3 Seconds	330 kW		Battery Cell Configuration	96 in Series
	Discharge 10 Seconds	230 kW		Data Connection	Deutsch HDP24-24-35PE
				Regulation	EU R100.1 Compliant AU VSB14 Compliant

KEY COMPONENTS

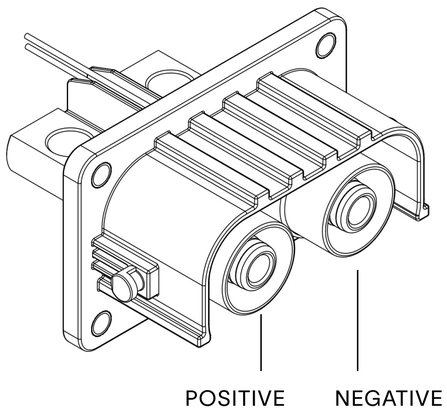


Hardware and software proven in hundreds of vehicles, now integrated to make conversions as simple as possible. Structural rails on base allow mounting to vehicle chassis or existing engine mounts.

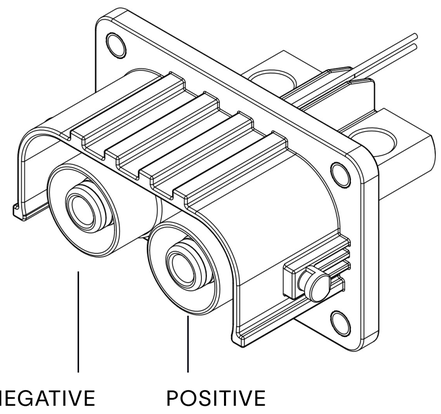


HIGH VOLTAGE CONNECTIONS POLARITY

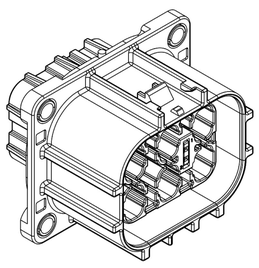
CCS HV CONNECTOR

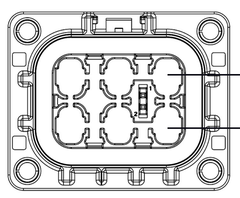


DRIVE UNIT HV CONNECTOR

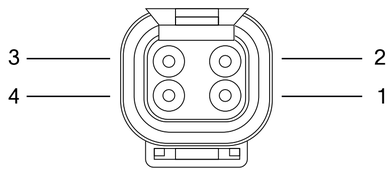


3 X 25 AMP HV CONNECTOR



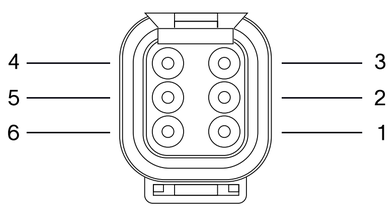


LOCK MOTOR PLUG



PIN	DESCRIPTION	NAME	COLOUR
1	Lock motor out -	FB_OUT0	Red
2	Lock motor out +	FB_OUT1	White
3	Lock motor Input - Inverted	LOCKMOTOR_SW	Yellow
4	Constant 12V	12V_CONSTANT	Blue

CHARGE STATUS/LOCK BUTTON PLUG

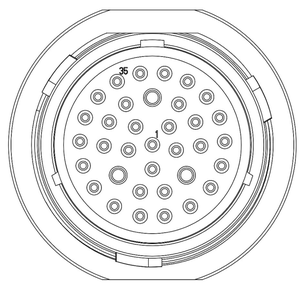


PIN	DESCRIPTION	NAME	COLOUR
1	Charge Stop Switch	STOP_SW	Yellow
2	Constant 12V	12V_CONST	White
3	Ground	GROUND	Black
4	Charge Status LED - Red	LED0	Red
5	Charge Status LED - GREEN	LED1	Green
6	Charge Status LED - Blue	LED2	Blue

LOW VOLTAGE CONNECTIONS

DEUTSCH DT+DTM 35 PIN PLUG

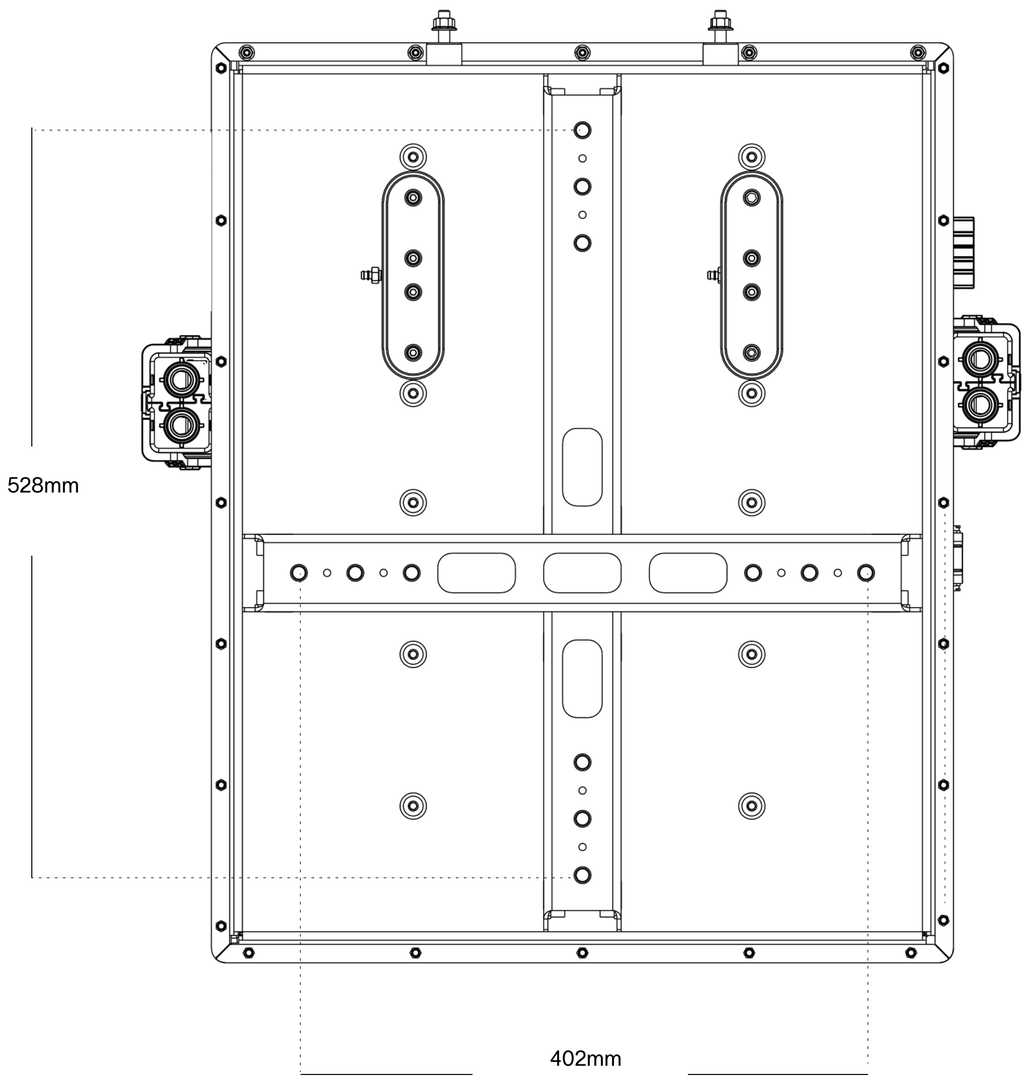
HDP24-24-35PE



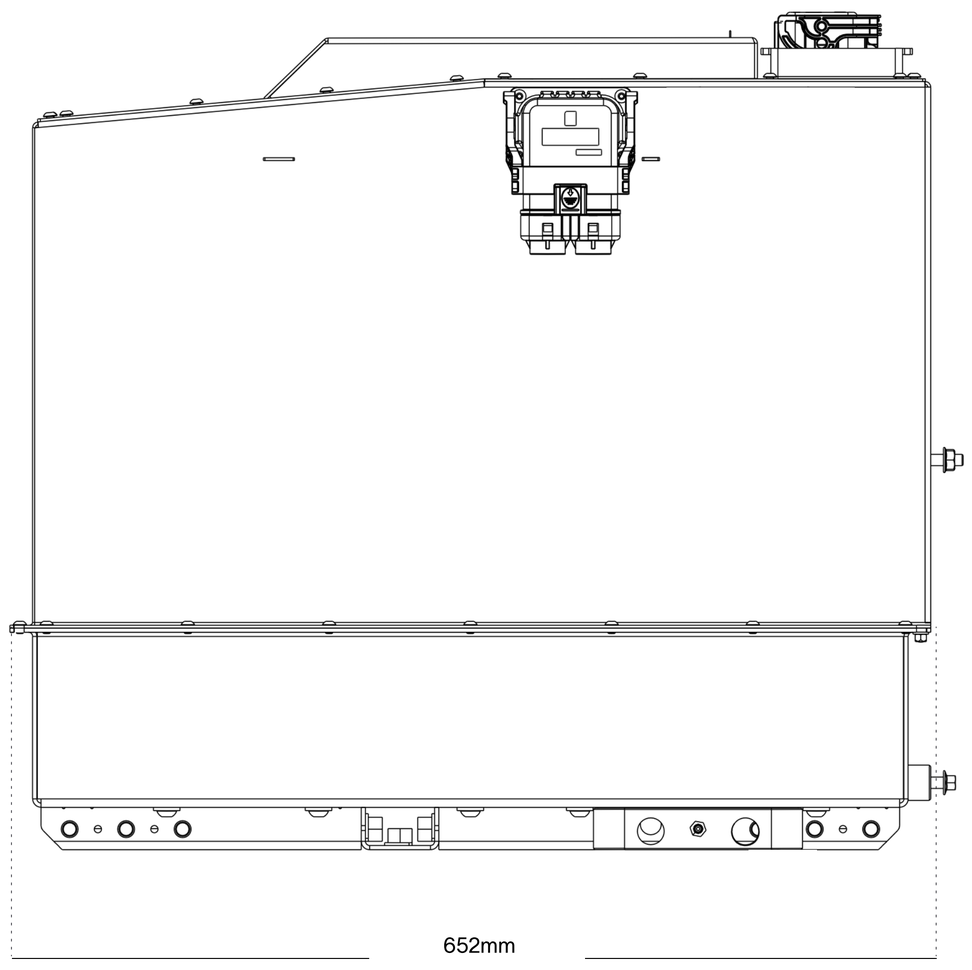
PIN	DESCRIPTION	NAME	FUNCTION
1	Switched 12V - Charge	CHARGE	Voltage Input
2	BMS CAN 1 & Contactor Control	CAN1_H	Comms
3	BMS CAN 1 & Contactor Control	CAN1_L	Comms
4	BMS CAN 2	CAN2_L	Comms
5	BMS CAN 2	CAN2_H	Comms
6	BMS Secondary Control	REMOTE +	Comms
7	Switched 12V - Ignition	IGN	Voltage Input
8	BMS Secondary Control	REMOTE -	Comms
9	BMS Secondary Control	REMOTE_SHIELD	Comms
10	Charge Status LED - Green	LED1	Signal Output
11	Ground	GND	Voltage Input
12	Contactor Control 12V supply	CONT_CONT_SUPPLY	Voltage Input
13	Charge Status LED - Red	LED0	Signal Output
14	Constant 12V	12V CONST	Voltage Input
15	BMS Discharge Enable	DISCHARGE_EN	Signal Output
16	BMS Charge Enable	CHARGE_EN	Signal Output
17	Lock motor out -	FB_OUT0	Signal Output
18	Lock motor out +	FB_OUT1	Signal Output
19	Charge Port Temp 0 +	PTC0+	Signal Input
20	BMS MPO3 - Fan enable	FAN_EN/MPO3	Signal Output
21	Charge Port Temp 0 -	PTC0-	Signal Input
22	BMS MPI1 - J1772 Pilot	CP	Signal Input
23	Charge Port Temp 1 +	PTC1+	Signal Input
24	Charge Port Temp 1 -	PTC1-	Signal Input
25	Charge Status LED - Blue	LED2	Signal Output
26	Lockmotor Input	POS_FB	Signal Input
27	Lockmotor Input - Inverted	LOCKMOTOR_SW	Signal Input
28	BMS MPI2 - J1772 Proximity	PP	Signal Input
29	Charge Stop Switch	STOP_SW	Signal Input
30	High Voltage Interlock	HVIL	Signal I/O
31	High Voltage Interlock	HVIL	Signal I/O
32	High Voltage Present	HV_PRESENT	Signal Output
33	-	-	-
34	-	-	-
35	-	-	-

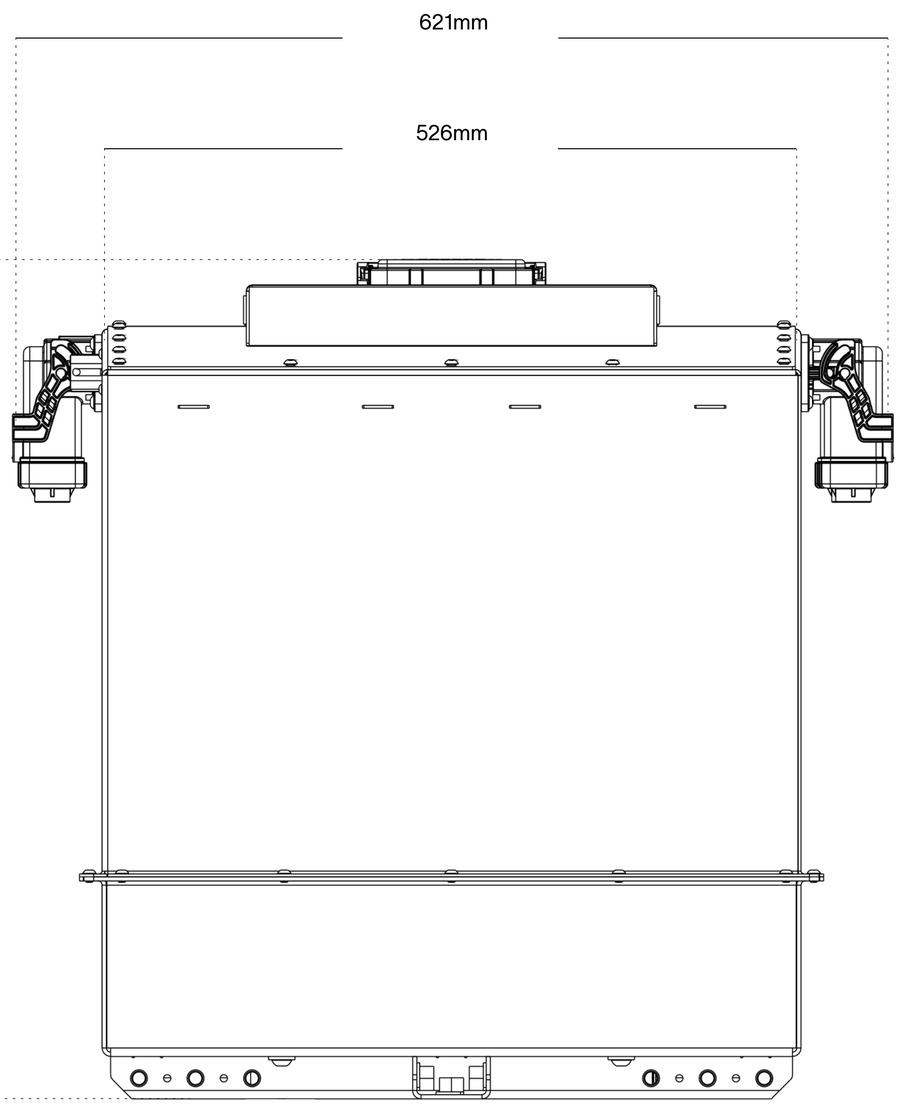
DIMENSIONS

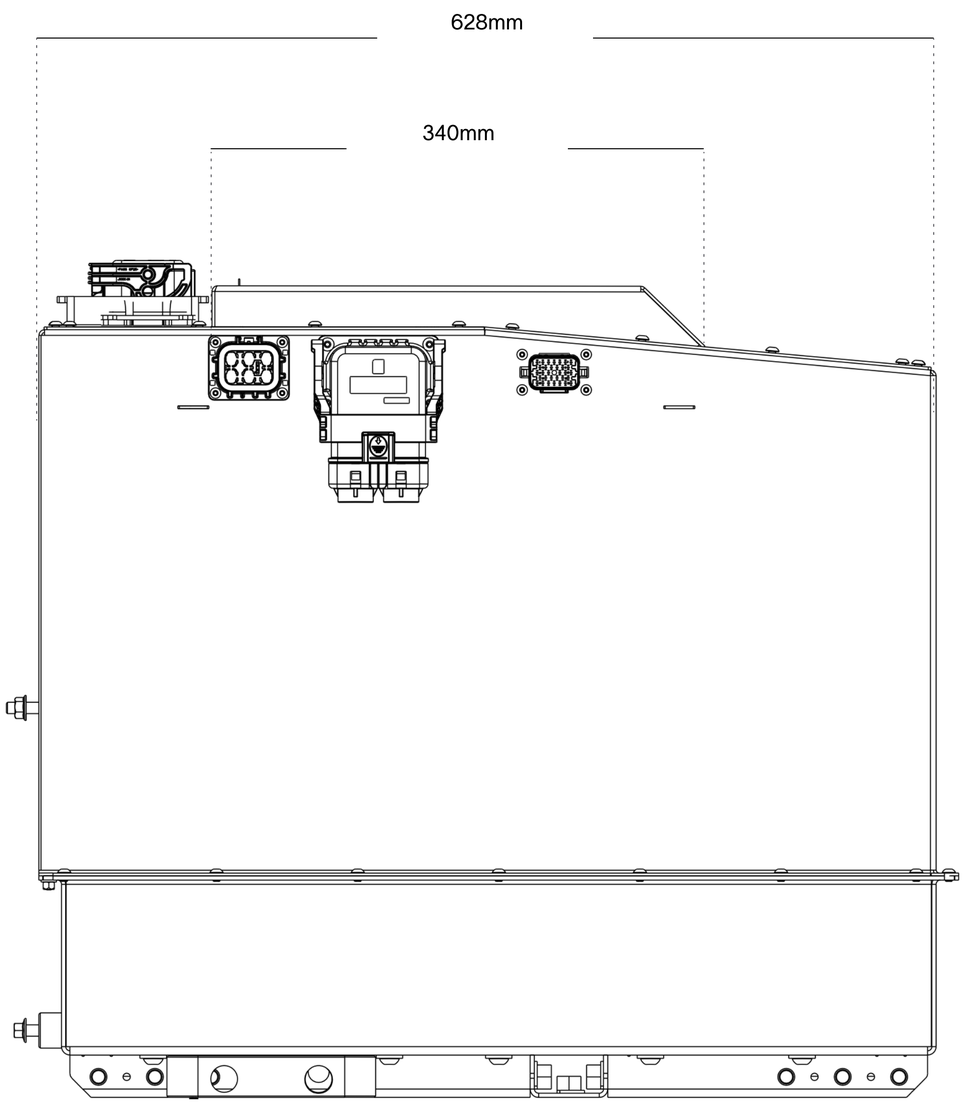
BOTTOM



LEFT







FRONT

RIGHT