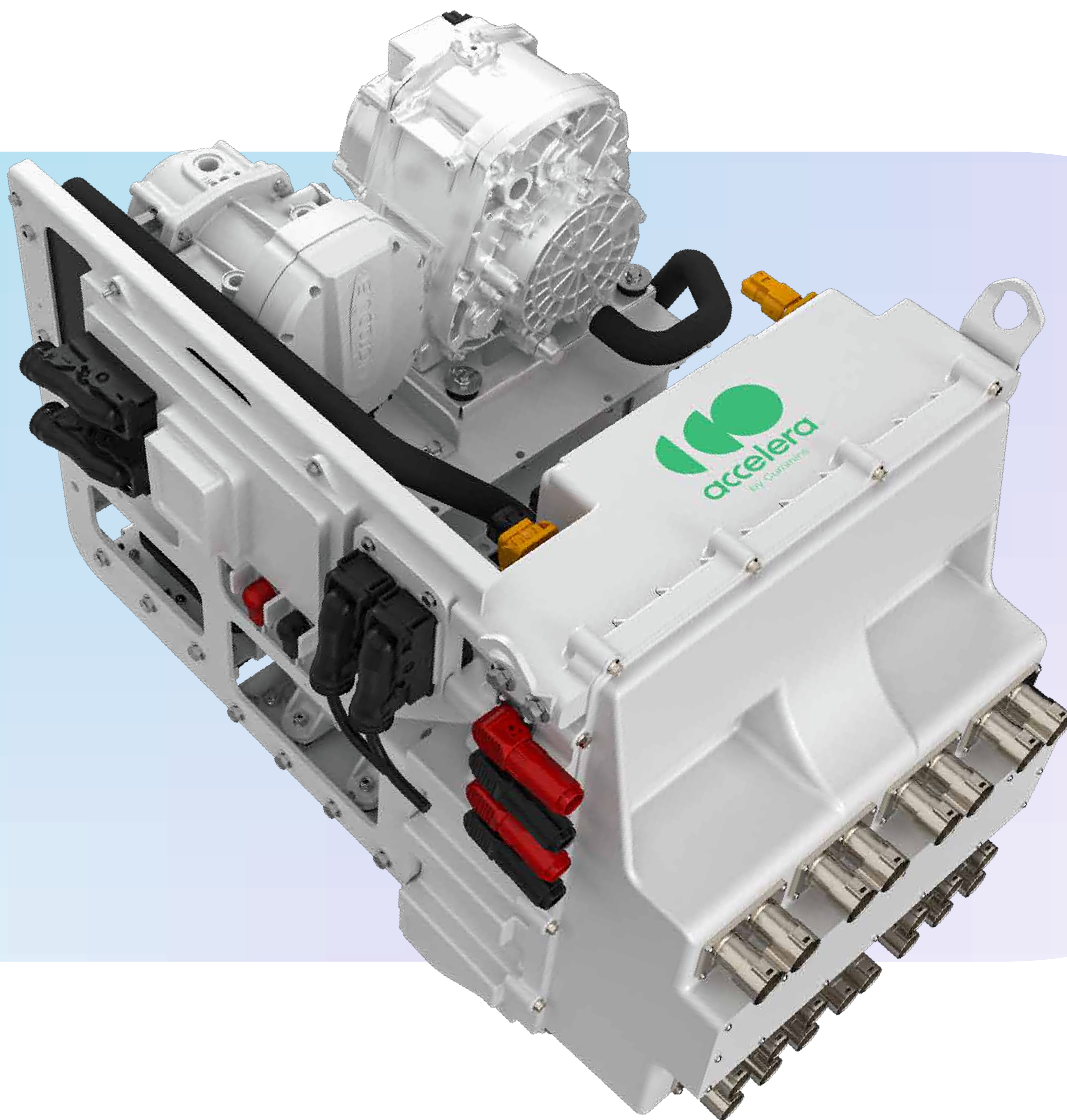


Power control + accessory system

PCAS 3.0

accelerate the shift™



12 components. 1 powerful product.



Power hub

- DC-DC converter
- High voltage power distribution unit
- Low voltage distribution system (LVDS)
- PCAS system controller (board-integrated, one-charge controller)

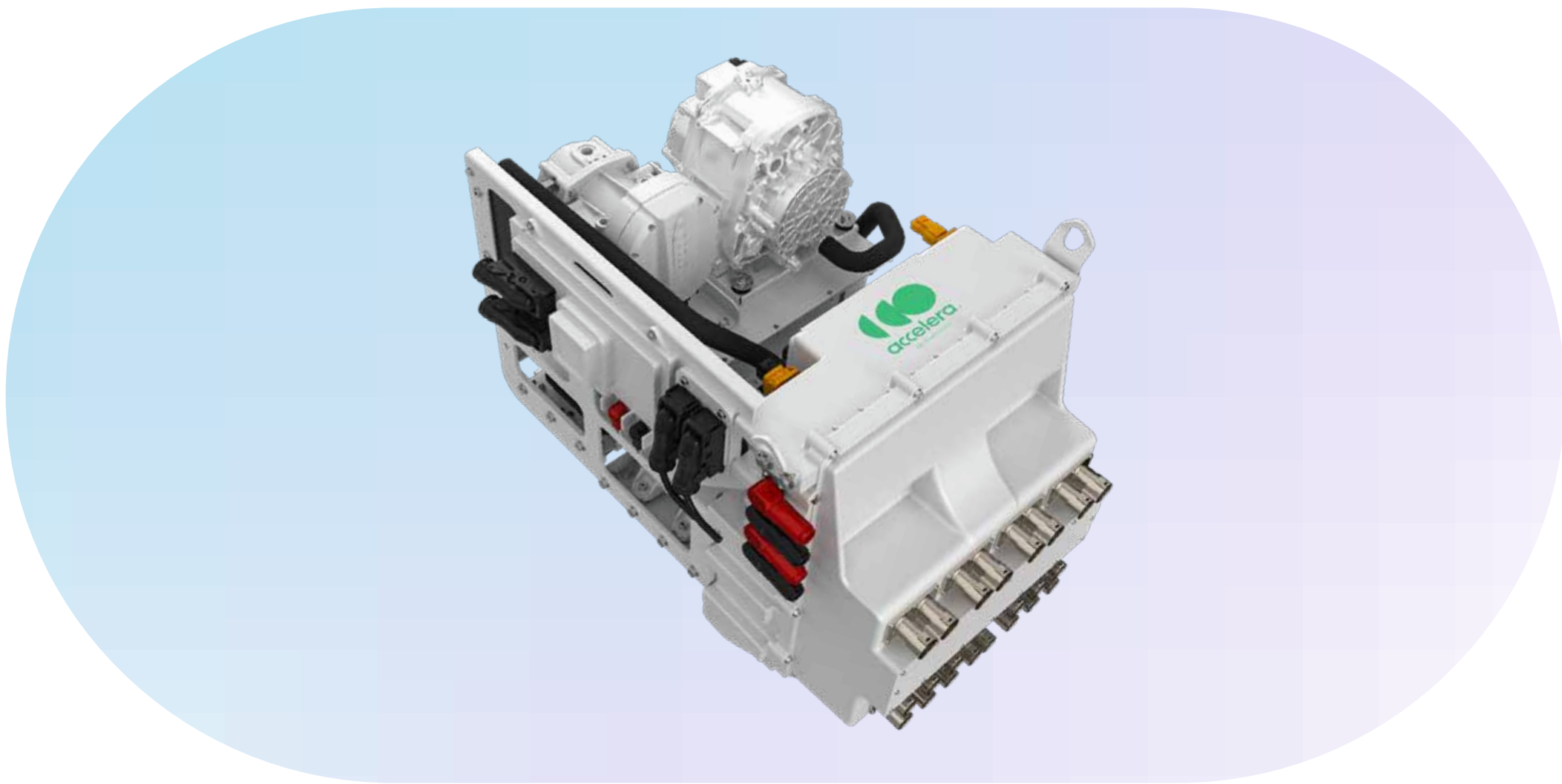
Thermal hub

- Battery cooling and heating
- Cabin cooling and heating
- Power electronics cooling (e.g., traction inverter, DC-DC, etc.)

Auxiliary hub

- Hydraulic pump
- Brake air compressor
- AC on-board charger

Modular design to simplify integration.



Benefits



Ease electric powertrain integration
Centralizes 12 different electric vehicle (EV) components into single unit

Lower TCO
Single drop-in module reduces the number of components and OEM manufacturing overhead

Simplified maintenance
Reduces downtime with a clean-sheet design, enabling easy access to all serviceable parts

Higher reliability
Reduces high-voltage cabling rub points, electrical emissions and electromagnetic interference

Configurable platform
One core platform designed for adaptability to meet the requirements of various eMobility applications

Technical specifications*



Overall system	Dimensions	767 (H) x 679 (W) x 971 (L) mm		
	Weight	559 lbs		
	Ambient temp. range	-40°C to +55°C		
	System high voltage	450 to 850V		
	System low voltage	Option 1 12V	Option 2 24V	
	Ingress protection	IP6K9K and IP67		
	Functional safety	ISO 26262 compliant		
	Cyber security	ISO 21434; R155/156 compliant		
Power hub	DC-DC converter (12V)	Option 1 4 kW	Option 2 8 kW	
	DC-DC converter (24V)	Option 1 5 kW	Option 2 10 kW	
	HVPDU (ESS input)	Up to 6 ESS strings (420A each)		
	HVPDU (DC fast charge)	Up to 2 ports (500A each)		
	HVPDU (charging protocol)	Option 1 CCS 1	Option 2 CCS 2	Option 3 NACS
	HVPDU (traction inverter output)	Up to 2 ports (400A each)		
	HVPDU (ePTO/IBCR/5th wheel output)	Option 1 None	Option 2 260A	
	HVPDU (other low power aux output)	Option 1 None	Option 2 Up to 60A	
	LVDS	LV power for PCAS + up to 6 ESS strings + up to 2 traction systems		
	PCAS controller (SW suite)	Option 1 PCAS controls	Option 2 PCAS + SCM (Accelera battery + traction) controls	
Auxiliaries hub	AC on-board charger	Option 1 None	Option 2 19.2 kW NA	Option 3 22 kW EU
	Hydraulic power steering pump	Option 1 None	Option 2 19 lpm @ 186 bar	Option 3 25 lpm @ 206 bar
	Brake air compressor	Option 1 None	Option 2 Up to 14 cfm @ 13 bar	
Thermal hub	Battery cooling	12 kW		
	Battery heating	10 kW		
	Cabin cooling	Option 1 None	Option 2 7 kW	
	Cabin heating	Option 1 None	Option 2 10 kW	Option 3 22 kW
	Traction system coolant flow rate	Up to 50 lpm		



The information herein is being provided for reference only and is subject to change without notice.

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