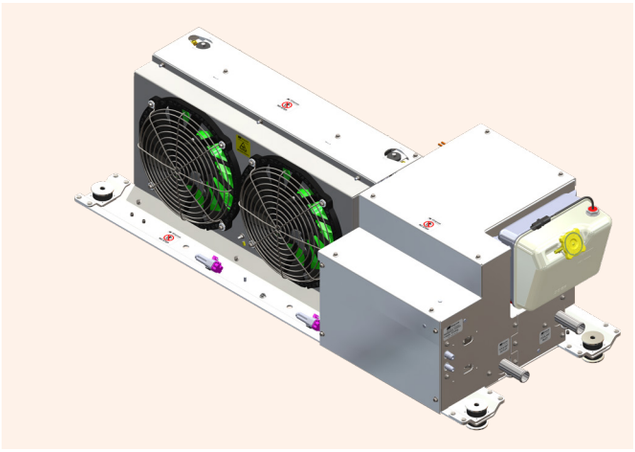
BATTERY THERMAL MANAGEMENT SYSTEM (BTMS)

GEN3 STANDARD



RANGE OPTIONS

3A-6725-0A00 - Active / Passive, Cooling & Heating

3A-6725-0B00 - Active / Passive , Cooling Only

3A-6725-0C00 - Active Cooling & Heating

3A-6725-0D00 - Active Cooling Only

BTMS FEATURES

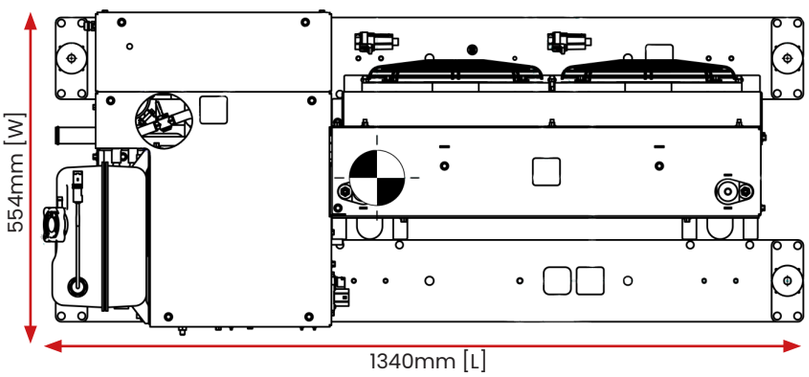
Utilising the latest advancements in control and design, our Gen3 BTMS provides advanced functions for the critical thermal management of vehicle battery systems. Designed to work across a wide range of applications and markets across the world the Gen3 builds on the performance and reliability of the previous generation BTMS designs. The standard model maximises performance with a condenser module separate to the chiller, pump and controls unit.

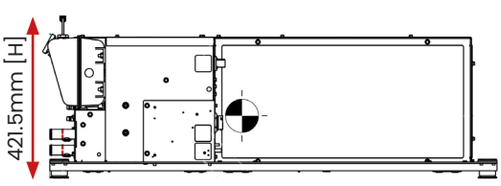
GEN3 Features

- Configurable with the options of active cooling, passive cooling and/or heating.
- Suitable for roof mounting or chassis / body mounting.
- Integrated water pump.
- CAN J1939 “plug and play” control.
- CAN boot loader for easy software updates.
- DM1 diagnostics messages on CAN network.
- Fuse-less smart power distribution on HV and LV circuits.
- Power consumption reporting (optional).
- Electric expansion valves.
- Pressure transducers for anolouge fan regulation.
- Brushless fans.
- Lightweight header tank.
- 24VDC for controller, fans and pump

The GEN3 Standard is also available as a split system to improve integration with vehicle architecture

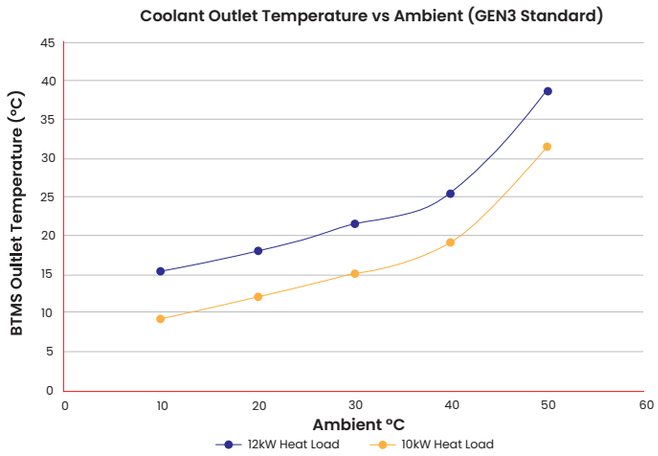
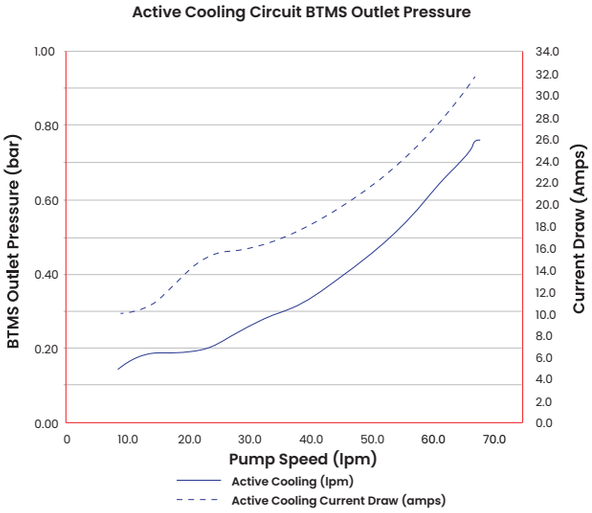
DIMENSIONS





Grayson
Thermal Systems

TECHNICAL INFORMATION

GEN3 Standard	40°C	50°C
Maximum cooling capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (l/m)	11.5 40 25 40	10 50 25 50
Water heating capacity	3.6Kw (5kW Optional)	
Operating voltage	600V DC / 24V DC	
24V DC Maximum power consumption (pump / fan) (2 fans)	18 + 48A	
600VDC Maximum power consumption (compressor / heater)	6.25A	
Maximum weight (without coolant) (kg) (0AXX variant - active and passive cooling and heating)	74kg	
Dimensions L x W x H (mm)	1340mm (L) x 554mm (W) x 421.5mm (H)	
Refrigerant type Charge weight (kg)	R134a / 407c Optional 1.2kg	
Connector types (High Voltage (4-Pin) 24V DC & Control Protocol via CAN J1939	TE Connectivity (PA66-GF35) Deutsch (HDP24/26)	
Integrated Header Tank	Yes	
Outlet Size O.D. (mm)	28.75 mm	
Anti-Vibration mounts	Included	
Fan technology	Brushless Motor	
Integrated water pump	Yes (brushless motor)	
Option for remote water heater	Yes – upto 35kW	

(Cooling curves at 40 l/min) Flow Rate