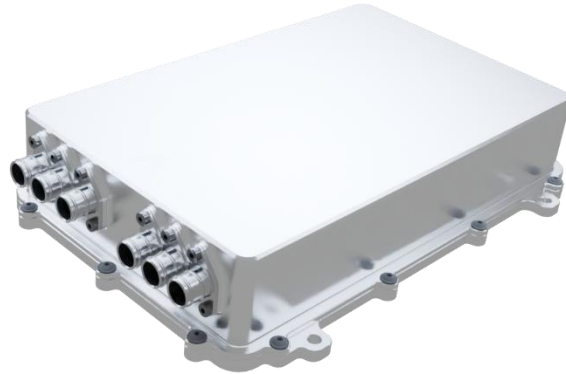


# MCU-400 SiC INVERTER

## PRODUCT DESCRIPTION

Motion Applied's MCU-400 inverter leverages over a decade of expertise in Silicon Carbide (SiC) technology, in a new ultra-lightweight design.

Designed primarily for electrification applications across automotive, aerospace, marine and defence where every gram counts.



Performance	
Voltage	250 – 900 V
Peak current	320 Arms <sup>1</sup>
Continuous current	180 Arms <sup>1</sup>
Efficiency	Over 97% typical, 99% peak
Switching frequency	10 – 32 kHz continuously variable at 1kHz rate
Electrical frequency	Up to 2.5 kHz

Communication and Motor Feedback	
Low voltage input	8 – 32 V nominal
Communication	3 CAN2.0 interfaces
Debugging	1 Ethernet interface
Motor temperature feedback	Supports PT100, PT1000, NTC10k, NTC100k and KTY
Motor position feedback	Supports resolvers and analogue SinCos encoders Support for sensorless control <sup>2</sup>

Mechanical	
Mass	<4.0 kg <sup>3</sup>
Volume	3.6 L <sup>3</sup>
High voltage cables	Supports 16mm <sup>2</sup> and 25mm <sup>2</sup> cables

Environmental	
Coolant	50/50 water-glycol
Operating temperature	-40°C to +85°C
Ingress Protection	IP67 and IP6k9k

1. 750 V, 12kHz Fsw, 70°C water-glycol coolant  
 2. Requires calibration to paired motor.  
 3. Based on B-Sample design, subject to change. Excluding cables.