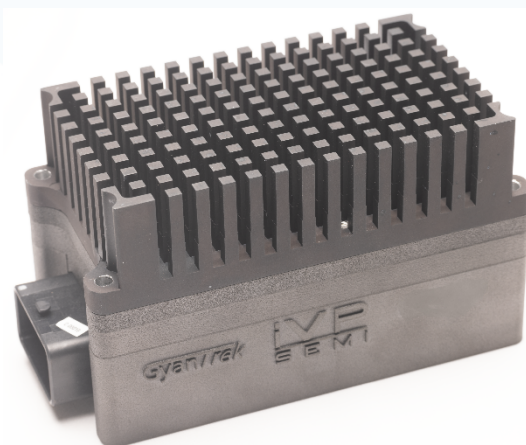


Description

This EV traction Inverter is designed using patented Thermal stack design and delivers high output in a compact size. The inverter has high thermal capacity and low junction temperature ripple thereby has a long operating lifetime. The inverter can be used with a variety of motors.

Features

- 5 kW (48V, 125A)
- Suitable for ACIM, BLDC, PMSM, Syn-RM
- Integrated IPM (3-ph power stage) + Controller inside
- OC, OV, UV, OT Protections
- CAN and RS485 interface
- Hall Sensor, Encoder, Resolver, Back EMF feedback
- High Thermal performance
- High Thermal impedance, low T_J ripple
- Long Operating Life
- Designed to meet Automotive requirements



Value Proposition

- Uses Patented Thermal design for enhanced Performance
- Compact, Lightweight solution
- Designed and Made-in India
- Long Operating life
- Local Technical Support and Service

Target Specifications for Traction Inverter Module					
Rev. 1.0, 21 May 2026					
Parameter	Min.	Typ.	Max.	Units	Conditions
Output Power		5	7.5	kW	Continuous/Peak
Operating Voltage	36	48	60	V	48V Nominal
Continuous RMS Current($T_{sink} = 100^{\circ}C$)		125		A	Continuous Rated
Peak RMS Current			177	A	Short Duration(1 Min)
Switching Frequency		20		kHz	Configurable
Communication Protocols	CAN, RS485				
Dimensions	174 X 98 X 92			mm	L X W X H
Operating Life / Cycles			TBD		Load Dependent
Architecture	Stacked Design				
Efficiency		97		%	
Operating Temperature	-40		85	$^{\circ}C$	

** Advance Product information. All specifications are subjected to change without notice