

Weber

SEDEMAC has been developing a suite of products for OEMs participating in the EV story. SEDEMAC provides complete control and power electronics solution-set for 48V electric vehicle (EV) and hybrid electric vehicle (HEV) systems. The portfolio includes motor controllers, battery management systems, and DC/DC converters.

SEDEMAC's sensorless motor controls offering, **Weber**, is a product-series of **Field Oriented Control (FOC)** enabled BLDC motor controllers. These controllers operate two control loops; the inner control loop controlling machine currents for optimal torque generation, and the outer control loop controlling torque reference and field weakening logic. **Weber** also has a regenerative braking logic for energy efficient operation of the vehicle.

WEBER



Highlights

- Unique sensorless BLDC controls at zero-speed (patent pending)
- Unlike traditional sensorless algorithms which operate only at high motor speeds, SEDEMAC's motor controllers can provide full starting torque from zero-speed. This eliminates the need for high end encoders
- State-of-the-art motor control FOC algorithms such as MTPA (Maximum Torque Per Ampere), Field Weakening, and Regenerative Braking, provide high efficiency power conversion, and smooth torque output

About Company

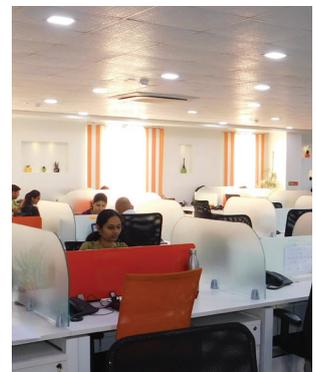
SEDEMAC Mechatronics is a mechatronic products company engaged in the business control solutions for automotive and off-highway powertrains. The company manufactures a wide range of control products like a variety of AMF genset controllers, electronic governors and variable speed controls for diesel gensets / engines. SEDEMAC's portfolio for gasoline engines / powertrains includes products like Smart Ignition, Integrated Starter Generator (ISG) ECU, Automated Manual Transmissions (AMT) ECU, Electronic Fuel Injection (EFI) ECU and so on.

A group of researchers founded SEDEMAC in 2007 in Mumbai, India. What started as a small lab-based enterprise has now grown into a rapidly growing company that supplies / licenses unique control products to the leading OEMs in India.

Each of the SEDEMAC's products goes through complete cycle of need of identification, development of relevant technology, design of practical products around developed technology, validation of products coordinating with key potential customers, organization of supply chain for series production, delivery to customers and effective after sales product support.

SEDEMAC is #1 in genset market control in India today and is the preferred choice of leading OEMs for unique control products.

Our Facilities



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