

Electronic Controls for Mobile/Off-Highway Applications

As technology in the mobile market continues to advance, OEMs are shifting from manual controls to electronic controls as they accommodate the skill set and preferences of newer generations entering the workforce. To attain this talent pool and advance older controls to modern functionality, it's imperative that OEMs integrate electronic controls, which provide improved efficiency, advanced functionalities, and enhanced user experiences. By partnering with Evolution and embracing this shift with the comprehensive Bosch Rexroth Digital Application Solutions (BODAS) portfolio, OEMs can unlock new avenues for innovation, stay ahead of the technological curve, and meet the evolving demands of their customers.

Experienced Guidance

As a Bosch Rexroth certified Mobile Solutions Partner, Evolution is dedicated to the mobile on- and off-highway industry with experts ready to support OEMs with system, product, and troubleshooting solutions. With over 45 years of experience designing, engineering, and integrating mobile solutions, Evolution is perfectly positioned to help mobile OEMs integrate electronic controls for applications in many industries and markets.







BODAS: The Comprehensive Controls Solution

BODAS offers comprehensive IoT solutions, software, and electronic hardware designed explicitly for the off-highway market. With its advanced IoT infrastructure, BODAS provides future-proof solutions that combine Rexroth's expertise and application experience in mobile hydraulics and electronics.

- · Programming and software capability to support any application
- · Accommodation for application limitations
- · Increased application uptime with less operator dependence
- · Improved operator experience and easier troubleshooting
- · Open and modular system with a high level of cybersecurity

Connection Solutions



- Complete telematics solution with IT infrastructure enables numerous options to wirelessly access the control networks of mobile/off-highway vehicles
- Integrated IoT solutions for data management, fleet management, and condition monitoring
- Operators can analyze and visualize collected data through a vast selection of off-highway specific apps for fleet management, vehicle health, remote R&D service, and vehicle operations flow

Electronic Controls Hardware



- Open, scalable, and easily accessible mobile electronic controls platform
- · Control units, connectivity devices, sensors, and HMI
- Each component is freely programmable and readily compatible with BODAS Connect
- · Hassle-free experience and seamless integration into mobile machinery

Electronic Controls Software



- Standard application software and software architecture for electronic controls and machine functions based on BODAS Hardware
- Includes tools for programming, parameterization, and diagnosis of BODAS Hardware
- Perfectly harmonizes with Rexroth hydraulics to enable machine control







