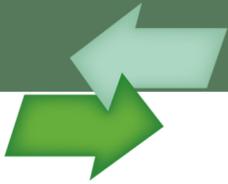


# ELECTRIFICATION KIT

GLR16 / 16.5kW 96V 58Ah



## Introducing the 2025 Electrification Range

Guilera has been providing electrification solutions since 2015 for motorcycles, off-highway, and marine vehicles. Our new 2025 range introduces the latest advancements in powertrain technology, combining a motor, controller, battery, and power electronics into a ready-to-integrate system.

## High-Performance Central Drive System

The GLR16 electrification kit is a high-performance, mid-mounted motor drive system engineered for seamless integration into electric vehicles requiring greater power and extended range. Featuring an advanced PMSM motor, a FOC MTPA controller, and a high-capacity 96V lithium battery, this system delivers outstanding acceleration, efficiency, and reliability for high-performance motorcycles, industrial applications, and off-highway vehicles.

## Benefits

- **Optimized Power & Battery Capacity** – Yields extended range and top performance in off-highway, urban and industrial EVs.
- **Cost-Effective Electrification** – Decades of expertise ensure a high-quality, affordable solution optimized for OEM electrification projects.
- **Integrated System for Fast Deployment** – Pre-configured with all essential components to simplify integration and accelerate time to market.
- **Industrial-Grade Durability** – IP67-rated for reliable operation in harsh environments, including off-highway and marine applications.
- **Energy-Efficient Performance** – Advanced FOC MTPA control maximizes battery efficiency, extending range while reducing energy consumption and costs.
- **Turnkey Integration & OEM Support** – Ready-to-use system with expert technical support for seamless OEM integration and validation.

**Motor** Model:GLRM16  
Type: PMSM  
Peak Power: 16.5 kW  
Max Shaft Torque: 180 N.m  
Max Shaft RPM: 3039 rpm  
Size: 241.1 × 182.7 × 222 mm  
Weight: 14.5 kg  
Protection Rating: IP67



**Battery** Model: GLRB16.5568  
Voltage: 72.4V (60V - 82V)  
Capacity: 58Ah (5568Wh)  
Discharge Rate: 3C  
Size: 450 x 250x 180 mm  
Weight: 28.0 kg



**Controller** Model GLRC16  
Control Type: FOC with MTPA algorithm  
Peak Output Current: 700A  
Nominal Voltage: 72V  
Efficiency: >95%  
Cooling System: Passive air cooling  
Com. Protocol: CAN bus  
Size: 211.0 × 161 × 80 mm  
Weight: 2.0 kg  
Protection Rating: IP67 - water and dust resistant



**HMI (Display Unit)**  
Screen Type: 3.5" TFT LCD  
Resolution: 480 × 800  
Size: 99 × 60 × 15 mm  
Weight: 0.2 kg



**Charger** Model: GLRCH8  
Charging Time: 3.5h  
Charging Current: 15A  
Size: 240 × 128x 63 mm  
Weight: 2.4 kg



**DC/DC Converter** Model: GLRD16  
Input Voltage: 50–120V DC  
Output Voltage: 14.5V DC  
Current: 10A  
Size / Weight: 93 × 94 × 50 mm / 0.6 kg



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## Performance Metrics\*

Top Speed:	130 km/h	Performance data is based on laboratory conditions:
Acceleration (0–50 km/h):	1.8 s	Rider plus vehicle weight 300 kg
Range:	101 km	Ambient temperature 25°C
Motor Torque:	180 N.m	Speed of 25 km/h.

## Applications: (\*) Actual performance may vary based on environmental and operational conditions.

- Electric Motorcycles – Urban and commuter bikes designed for high efficiency and low emissions.
- Three-Wheelers & Utility Vehicles – Light commercial transport solutions for urban and industrial applications.
- Off-Road & Recreational Vehicles – Electrified lightweight trail and adventure vehicles optimized for rugged terrains.
- Off-Highway Vehicles – Agricultural ATVs, electric UTVs, and industrial transporters built for demanding work environments.
- Riding Lawn Mowers – Electrification of professional and consumer-grade mowers for sustainable landscaping.
- Marine & Specialty Vehicles – Adaptable for watercraft, electric propulsion systems, and specialized vehicle applications.
- Electric Karting – Advanced powertrain solutions for high-performance electric karting applications



## Order Information

**GLR16** Electrification Kit (96V 58Ah 16.5kW PMSM System)

**Technical Notice:** Images and specifications are for reference only. Guilera reserves the right to modify product design and features without prior notice. The latest validated technical drawing of each power electrification kit component is the only official document certifying product characteristics.

### GUILERA S.A.

Founded in 1953, Guilera S.A. specializes in advanced electronic and electromechanical systems for the automotive, off-highway, and mobility sectors.

Our products include reliable DC-DC converters, electronic power control systems for traction, advanced flasher units, and solid-state electronics.

Guilera is committed to sustainability and social responsibility, integrating eco-friendly practices and pursuing CSR certifications.

Serving OEMs and Tier 1 suppliers, we continuously innovate to shape the future of transportation and mobility.

 <https://www.linkedin.com/company/guilera>

Carrer de Ramon Llull 8, 08750 Molins de Rei, , Barcelona (Spain) Tel.: +34 936 68 17 94 / e-mail: [guilera@guilera.com](mailto:guilera@guilera.com)

For more information write us an e-mail [guilera@guilera.com](mailto:guilera@guilera.com) or visit us at [www.guilera.com](http://www.guilera.com)

