



LIGHTNING
MOTORCYCLES

STRIKE_R



Ride the Lightning®



Ride the Lightning®



Shown in Brilliant Pearl White

When there's a new Lightning in the garage you get that faraway look. It is no ordinary motorcycle. Lightning electric motorcycles are designed for one thing, to be ridden. You may find yourself following the 3 R's... Ride, Rest and Repeat.

Lightning has been a leader in electric motorcycle innovation and engineering excellence since 2006. Lightning follows a tradition of racers who design, engineer and build vehicles that will change the world. Lightning offers distinctive electric motorcycles to meet the demand of those who desire the pinnacle of electric motorcycle technology with exceptional acceleration, handling, braking, long range, and fast charging.

The Lightning team devoted nine years of research and development, followed by more than five years of rigorous testing, validation and winning in competition.

Ride the Lightning is a register trademark of Lightning Motors Corporation.

Engineered by Enthusiasts for Enthusiasts



Strike R Performance



A key aspect of every Lightning motorcycle is performance. Based on the architecture and technology of the Lightning LS-218 SuperBike, the Strike R is engineered for the track but designed for the street.

The Strike's liquid cooled Ultra Power Dense Axial Flux motor produces 151 hp (112kw) and 120 lb-ft (162nm) of torque at the motor shaft – 600 lb ft (813nm) torque at the rear wheel. 487 lbs (220kg).

The Strike R's lower weight compared to other electrics offers superior acceleration, handling and braking.

Power to weight ratio: **.31 hp/lb** – 151 hp / 487 lbs. / 600 lb ft torque

To control Strike R power and instantly available electric torque, throttle response has been tuned for phenomenally smooth and intuitive power delivery. Strike riders will have a sense of total control in every riding environment – from carving up your favorite back roads, commuting or navigating urban settings.



Rider Position

Lightning Strike* (Yellow)

Lightning LS-218 (Blue)

* For a more upright position – optional riser clip-ons and forward mounted pegs available



Design & Engineering



Shown in available colors

The Strike R's design is intended to blend elements of track-ready performance, daily rideability and comfort, as well as aerodynamic efficiency to help extend range at higher speeds. With a beautifully dynamic sportbike esthetic, the Strike R shares engineering and design DNA with the LS-218 SuperBike in a slightly more compact package. Ergonomic focus on rider triangle geometry positions the seat, handlebars and foot pegs to make the Strike R feel like a natural extension of the rider.

By sculpting the fairing and bodywork in conjunction with extensive wind tunnel testing, computational fluid dynamic testing and internal competitive analysis indicates that the Strike R is by far one of the most aerodynamically efficient electric motorcycle on the market today when compared to other non-faired electric motorcycles. The Strike R achieves nearly 30% reduction in aerodynamic drag at 70 mph (112 kph) resulting in improved highway range.



Extensive wind tunnel and CFD (Computational Fluid Dynamic) testing



Premium Standard Features



The Strike R comes standard with Lightning's Performance Package which consists of premium components. Öhlins suspension developed in collaboration with Lightning engineers and manufactured exclusively for the Strike R, Brembo monoblock brakes, all carbon fiber body and fenders, forged 7075 alloy aluminum wheels, keyless remote start, Lightning Smart Dash, 20kWh battery pack and CCS Level 3 DC Fast Charge and J1772 Level 2 charging. NACS J3400 compatible with adapter.

Lightning offers the fastest, fast charging available with the optional 24.4kWh XFC® Xtreme Fast Charge System – only 10 minutes* 20% to 80% SoC with Level 3 charging.

*Dependent on ambient temperature.



Strike comes Standard with Forged 7075 Aluminum Wheels in Silver or Black Anodized Finish



Lightning Smart Dash Select Riding Modes, (Street, Performance, Track, Rain) Adjustable Regen and Charge Rate with the Lightning App

Strike R



Power and Torque

Power:

112 kw / 151 hp

Torque:

162 nm / 120 lb-ft

@ motor shaft

813 nm / 600 lb-ft

@ rear wheel

Power to weight ratio:

.31 hp/lb

RPM

Max. 12,000

Weight

487 lbs / 220 kg

Performance

Top Speed:

190 mph / 240 kph

0 to 60 mph: 2.2 seconds*

0 to 100 kph: 2.2 seconds*

*Dependant on rider ability, weight, weather and track conditions

Premium Standard Features

- CNC billet aluminum chassis & swing arm
- Ultra power dense Axial Flux liquid cooled motor
- CCS Level 3 DC fast and J1772 Level 2 charging
- NACS J3400 compatible with adapter
- Battery pack: 20kWh (24.4kWh XFC optional)
- 3.3kw Level 2 on-board charger
- Advanced Battery Management System
- Keyless remote start
- Lightning Smart Dash
- Carbon fiber body & fenders
- Öhlins suspension developed in collaboration with Lightning engineers and manufactured exclusively for the Strike R
- Brembo Racing GP4 monoblock brakes
- Pirelli Diablo SuperCorsa tires
- Lightning design forged 7075 alloy aluminum wheels
- Choice of silver or black anodized finish
- Three standard colors – Pearl White, Lightning Blue Metallic or Racing Yellow Metallic
- LED lights and turn signals
- Corbin premium saddle
- Chain drive
- Rear wheel spools



Strike R



Strike R comes standard with CCS Level 3 & J1772 Level 2 Charging NACS compatible

CHARGE TIMES

Standard 20kWh Battery Pack

35 minutes* 20% to 80% SoC - CCS Level 3 DC Fast Charge (NACS Compatible)

Optional 24.4kWh XFC Xtreme Fast Charge

10 minutes* to 80% SoC 24.4kWh with Level 3

* NOTE: Times may vary depending on charger and environmental factors

Safety

- ABS braking*
- Regen activated brake light
- Fast Charge redundant system safety sensing
- Kickstand position warning light
- Available Q3 2025

Convenience

- Reverse low speed assist
- Cruise control
- Rider defined regen, charge rate and selectable riding modes with the Lightning App

Options

- 24.4kWh - Lightning XFC® Xtreme Fast Charge System
- Öhlins steering stabilizer
- Custom paint color - select any PPG finish
- For a slightly more upright riding position - riser clip-on bars, forward pegs and brake lever assembly
- Handlebar mounted rear brake lever (foot brake delete)
- Removable CNC aluminum rear foot pegs
- BST carbon fiber wheels
- Carbon fiber swing arm (competition use only)
- Drag race - removable swing arm extensions
- Road race package



Xtreme Fast Charge Option



The Fastest Fast Charging Available

10 minutes* = 20 to 80% SoC, 24.4kWh battery
10 minutes* = 135 more highway miles, 262 city
Charging with Level 3 DC Fast Charger / Highway 70 mph / City 30 mph

* Dependent on ambient temperature.

Lightning's XFC® Xtreme Fast Charge System consists of Proprietary Technologies and Intellectual Property for the Fastest DC Level 3 fast charging available offered on any electric motorcycle. Extra cost option.

Exclusive Xtreme Fast Charge Components

- Lightning XFC Battery Management System
- Lightning XFC Battery Monitoring System
- Lightning XFC Thermal Management System
- Lightning XFC Proprietary Software
- Lightning RSSS (Redundant System Safety Sensing)
- Robust Level 3 DC Fast Charge Conductivity Hardware
- XFC Elemental Silicon Anode Batteries
- 3 years, thousands of miles of reliability and durability validation



XFC®

Xtreme Fast Charge Emblem
Signifies Peerless Technology
and Charging Performance

XFC® Xtreme Fast Charge - Less Time on the Cord, More Time on the Road



Specifications & Performance

Strike R

Motor	Ultra Power Dense Axial Flux - liquid cooled
Electronics Cooling	Liquid cooled
Chassis & Swingarm / Body	CNC billet aluminum alloy / Carbon fiber
Swingarm Mount	Concentric / Eccentric mount for tuning weight transfer
Transmission (none)	Chain direct drive – Front sprocket 520 / Rear sprocket aluminum 520 / 520 chain
Battery Pack	20kWh Included / Optional 24.4 kWh XFC – Xtreme Fast Charge System
Suspension	Front: Ohlins / Lightning Part Number LM-02010_A_SR – built by Ohlins exclusively for Strike R Ohlins FGRT inverted fork – dyno tuned by Ohlins / Lightning exclusively for the Strike R - NIX30 cartridge internals, TiN surface treatment, billet aluminum radial caliper mountings, fully adjustable for preload, ride height, high and low speed compression and rebound Rear: Ohlins / Lightning Part Number LM-08170_A_SR – built by Ohlins exclusively for Strike R Ohlins TTX36 shock and linkage system, fully adjustable for preload, ride height, high and low speed compression and rebound. Optional carbon fiber swing arm available.
Brakes	Front: Brembo Racing GP4-RX CNC billet radial 4-piston calipers, Dual Brembo T-Drive 320mm fully floating rotors. Rear: Brembo
Wheels	Lightning forged 7075 alloy aluminum Front: 3.5"x17" Rear: 6.0"x17"
Tires / Lean Angle	Front: 120/70ZR17 Rear: 190/55ZR17 Pirelli Diablo SuperCorsa / Up to 60 degrees
Dash	Lightning Smart Dash
Regenerative Braking / Charge Rate	Programmable with the Lightning App
Riding Modes	Street, Performance, Track & Rain – selectable with the Lightning App
Seat Height	32" (81cm) – adjustable from 29" (60cm) to 35" (100cm) Foot pegs have significant adjustability / rear pegs for passenger available
Weight	487 lbs./ 220 kg

Performance

Power / Torque	151 hp (112kw) / 120 lb-ft (162nm) @ shaft 600 lb ft (813nm) @ rear wheel
Maximum RPM / Power to Weight	12,000 / .31 hp/lb
0 to 60 mph* / Top Speed	2.2 seconds* / 190 mph (305 kph) * Dependant on rider ability and track conditions



20kWh Battery Range

20kWh Battery (SAE J2982 Riding Range Test vs Real-World Riding Range)

20kWh Usable	Per SAE J2982 Range Test		Real-World Riding	
Route Type	Miles per Full Charge	Calculation*	Miles per Full Charge	Calculation*
City Avg: 30mph Max 40mph	410	Urban Riding Stop & Go	350	Based on Real-World Tests w/WLTP & EPA Test Protocol
Highway 55mph	217	Highway 55mph	200	Based on Real-World Tests w/WLTP & EPA Test Protocol
Combined City & Highway at 55mph (50/50)	314	Highway at Average 55mph	275	Based on Real-World Tests w/WLTP & EPA Test Protocol
Highway 65mph	175	Highway 65mph	125	Based on Real-World Tests w/WLTP & EPA Test Protocol
Combined City & Highway at 65mph (50/50)	292	Highway at Average 65mph "Highway Commuting Range"	255	Based on Real-World Tests w/WLTP & EPA Test Protocol

***PLEASE NOTE - ACTUAL RESULTS WILL VARY**

Range will be affected and vary by riding style (low speed vs high speed / throttle modulation / acceleration rate), weight (rider and cargo), rider position (tuck vs upright), route (city vs highway / flat vs grades / straight vs winding), weather conditions (wind, temperature, humidity and precipitation), tire pressure and proper maintenance.



24.4kWh XFC® Battery Range

24.4kWh XFC® Xtreme Fast Charge

24kWh Usable	Per SAE J2982 Range Test		Real-World Riding	
Route Type	Miles per Full Charge	Calculation*	Miles per Full Charge	Calculation*
City Avg: 30mph Max 40mph	492	Urban Riding Stop & Go	420	Based on Real-World Tests w/WLTP & EPA Test Protocol
Highway 55mph	303	Highway 55mph	240	Based on Real-World Tests w/WLTP & EPA Test Protocol
Combined City & Highway at 55mph (50/50)	376	Highway at Average 55mph	330	Based on Real-World Tests w/WLTP & EPA Test Protocol
Highway 65mph	198	Highway 65mph	160	Based on Real-World Tests w/WLTP & EPA Test Protocol
Combined City & Highway at 65mph (50/50)	350	Highway at Average 65mph "Highway Commuting Range"	306	Based on Real-World Tests w/WLTP & EPA Test Protocol

***PLEASE NOTE - ACTUAL RESULTS WILL VARY**

Range will be affected and vary by riding style (low speed vs high speed / throttle modulation / acceleration rate), weight (rider and cargo), rider position (tuck vs upright), route (city vs highway / flat vs grades / straight vs winding), weather conditions (wind, temperature, humidity and precipitation), tire pressure and proper maintenance.

Strike R





LIGHTNING

MOTORCYCLES

Ride the Lightning®

Visit us at www.lightningmotorcycle.com

Lightning Motors Corp

2360 Technology Parkway
Hollister, California 95023
United States of America

Ride the Lightning® is a register trademark of
Lightning Motors Corporation.



LMC-SR-2024 A