



**TAKE CHARGE™**

**2016**  
PRESS KIT



Greetings from Zero Motorcycles,

This is a great time to be a motorcycle enthusiast. Riders have a tremendous number of choices that offer advancements in performance, features and design...it's amazing how far we've come.

Yet, despite all of the progress in the industry, only one brand has delivered on innovation that fundamentally transforms the motorcycle experience and successfully made that technology widely available. Since 2006—when we first began building motorcycles—we have worked ceaselessly toward mastering the art and science of electric propulsion to create a superior ride.

Ten years later, the results can be seen in the grins of thousands of riders worldwide. Smiles are about to get even wider. Let's see what's new for 2016 at Zero Motorcycles, starting with an exciting pair of bikes.

First, we've taken the concept of supermoto and amped it up in the form of the new Zero FXS. Derived from the popular Zero FX—"The world's most entertaining electric" according to *Cycle World*—the Zero FXS features 17-inch cast alloy wheels clad with Pirelli Diablo Rosso II tires and custom-tuned suspension and brakes. It changes direction faster than a cheetah shopping for groceries.

We are also proud to unveil the Zero DSR, the ultimate dual sport/adventure electric motorcycle. With an amazing 106 ft-lb of instant torque, seamless power, a commanding riding position and abundant suspension travel, this dynamic machine is equally at home on the pavement or dirt.

Speaking of power, a patent-pending new Z-Force® motor drives our premier models. Its interior permanent magnet (IPM) design improves performance during hard riding and allows higher sustained top speeds.

Got a commute? Looking for the most thrilling and economical way to get it done? The Zero S and Zero DS ZF9.8 models come with all the innovation we're known for, but in a lighter weight, highly responsive and maneuverable package. Best of all, they're at a new low price point. With plenty of range for the daily routine, the decision to ride electric just got that much easier.

In addition to the exciting new motorcycles, we have focused on extending range and charging faster. The 2016 lineup is able to travel farther, and with the new Charge Tank accessory, most models are able to charge three times more quickly and access the growing network of Level 2 charging stations. The Charge Tank is compatible with riders' 2015 models.

Of course, there are many more features to talk about. This press kit contains comprehensive information on our entire 2016 model line—including consumer, police/authority and military models—with concise product highlights and detailed specs. Please browse through to see what's new, and feel free to contact us if you have any questions.

A huge "Thank You!" to all who have joined us over the last decade...2016 is sure to be another record year for Zero Motorcycles.

Enjoy the ride,

Scot Harden

VP Global Marketing



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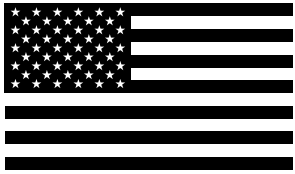




*"Best Electric Motorcycle of 2015"*

*Motorcycle.com*





CRAFTED IN  
CALIFORNIA

## THE STORY

Zero Motorcycles is the next step in motorcycle evolution. By combining the best aspects of a traditional motorcycle with today's most advanced technology, Zero produces high performance electric motorcycles that are lightweight, efficient, fast off the line and fun to ride. Each motorcycle is optimized from the ground up to leverage the revolutionary Z-Force® electric powertrain and uses a specially designed rigid, aircraft-grade aluminum frame to minimize weight.

Once a burning idea conceived inside a Santa Cruz, California, garage, Zero has rapidly grown into an internationally known motorcycle company. The result is groundbreaking motorcycle innovation that is available for customers to own today. Since 2006, when the first prototypes were produced, Zero has invited motorcyclists to go for a ride. Some things are better experienced than explained.

## THE MISSION

Zero Motorcycles creates a superior riding experience with its transformational line of electric-powered motorcycles. Our people are driven by innovation, charged by passion, guided by integrity and measured by results.

With an unwavering focus on quality, we are committed to delivering exceptional value, performance and fun for our customers and partners worldwide.

## THE NEXT STEP IN MOTORCYCLE EVOLUTION – 2016 MODEL LINE





## **THE GROWTH STRATEGY: BUILDING A GLOBAL BRAND**

Interest and developments in electric motorcycles are growing exponentially. This is merely the beginning of what industry experts expect to be the most rapidly expanding segment of the motorcycle business. Since inception, Zero has executed a well-thought-out strategy to build a global motorcycle brand and sustain a premium product line, while keeping prices low. The result has been—and continues to be—Zero's rapid rise and prominence in the electric motorcycle industry, which includes a focus on both consumer and fleet applications.

Central to this success is developing real products, positioning them well and delivering them. Zero is focused on building a solid business that will have customers, fleet buyers and partners enjoying the benefits of leading edge technology and a globally recognized brand.

Here's how Zero plans to continue to build a global brand while maintaining clear leadership:

### **A BETTER MOTORCYCLE: BALANCING PERFORMANCE, RANGE, WEIGHT, AFFORDABILITY AND AVAILABILITY**

Zero focuses on balancing performance, range, weight and affordability to build the best electric motorcycles available on the market today. With the intent of combining the long-perfected aspects of traditional motorcycles with today's most advanced technology, Zero has assembled a team of skilled engineers from both the motorcycle and high tech industries. The result: Zero is the only company to successfully bring an entire electric motorcycle product line to market, and Zero is the industry leader.

### **VOLUME PRODUCTION: GLOBAL AVAILABILITY OF ADVANCED TECHNOLOGY TODAY**

Zero has brought to market the best electric motorcycles that are in production today. By ensuring that Zero can meet the manufacturing demands of its customers, Zero creates a sense of confidence. With seasoned executives heading up both Zero's engineering and manufacturing teams, Zero is implementing time-tested processes of bringing motorcycles to market. Zero's model line policy is designed to bolster the integrity of its technology and product capabilities. To ensure that Zero's announcements will have maximum impact in the electric motorcycle industry, Zero withholds product announcements until we are confident that the product will succeed and that it can be rapidly delivered.

### **COMMITMENT TO QUALITY: APPLYING PROCESSES TO INNOVATION AND PRODUCTION**

Quality starts in Zero's design process, is carried through manufacturing and supported through its service department. Every motorcycle that Zero releases to the public is the result of a coordinated effort among departments. When customers purchase a Zero, they may do so with confidence. Zero guarantees the quality of its products and backs every motorcycle shipped with a two-year limited warranty on the entire motorcycle, as well as an industry leading five-year warranty on the power pack. All efforts in quality and customer support are backed by a well-managed business model that is financially sound and well-funded.



### **DIVERSE PRODUCT LINE: MOTORCYCLES TO MEET TODAY'S NEEDS**

Zero has developed a product line to meet the wide-ranging demands of individual customers as well as governments, organizations and businesses. Zero drives innovation through extensive research and development and will continue to bring new motorcycles to market to accommodate growing consumer and fleet demand.

From commuting to work to competing in races, Zero listens to customer feedback and develops future innovations to meet dynamic needs. Zero also works with police and enforcement agencies around the world that have added Zero to their fleets. Zero Motorcycles patrol models offer operational and tactical advantages that internal combustion competitors simply can't match.

### **INNOVATIVE POWERTRAIN: RUGGED, ROBUST, PATENTED AND DELIVERED**

Zero's innovation centers around its revolutionary powertrain technology that is designed to safely withstand the demands of aggressive use. The result is an incredibly powerful technology that scales rapidly, is long-lasting and reliable. With the most energy-dense power pack available in the electric vehicle industry and a sophisticatedly simple air-cooled motor, the Z-Force® powertrain has a competitive edge.

Zero's powertrain division offers businesses the opportunity to integrate the Z-Force® powertrain into applications that will benefit from a powerful, compact, maintenance-free and clean power source.

### **INNOVATIVE SALES AND SUPPORT MODEL: LEAN, PERSONAL AND STREAMLINED**

From start to finish, Zero takes care of customers and partners. Zero has developed a comprehensive sales and support model to facilitate rapid and responsible growth. The model revolves around enhancing customer experience, ensuring owner needs are met and maximizing owner benefits. Zero streamlines the buying experience by quickly connecting customers with authorized dealers and making it easy for them to make a purchase.

### **WHAT'S NEXT: CONSTANT INNOVATION AND STRATEGIC ANNOUNCEMENTS**

With the largest dedicated electric motorcycle engineering and manufacturing team in the world, Zero is developing groundbreaking technology on a daily basis. At the right time and place, Zero will let the world know about the details of these developments. Zero ensures that products in its development pipeline are well-tested and can be moved rapidly into customers' hands before revealing details to the press.





**NEW MODELS AMP UP THE FUN FACTOR.**



## **A GLOBAL IMPACT: GAINING WIDESPREAD RECOGNITION**

*"Zero has dramatically advanced the state of the art in electric motorcycles."*

**Motorcyclist**

*"It's basically the smoothest, quietest, sleekest running bike you can buy."*

**Bloomberg**

*"I love electric motorcycles not for the gas savings or the tech-geek coolness...but for the unique and magical experience an electric motorcycle affords."*

**Motorcycle.com**

*"All models show substantial upgrades over their already-impressive counterparts."*

**Los Angeles Times**

*"Zero offers a glimpse into a future where gasoline engines feel frankly archaic."*

**Gizmag.com**

*"The electric bike era is about to explode."*

**MSN**





*"Zero has more than lived up to its  
mantra of Sophisticated Simplicity."*

**Cycle News**





## GOVERNMENT INCENTIVES, INITIATIVES AND SUPPORT

From the national to local level, many governments around the world are offering incentives to those who purchase and operate electric motorcycles. While not all countries and regions have discounts or rebates, many are exploring such ideas or other incentives to reduce pollution or accelerate their economy. Zero Motorcycles works with organizations around the world to ensure that maximum exposure and benefits are given to this new industry.

By adopting this technology early, large organizations and individual owners have many opportunities to benefit. Some of these benefits are listed below.

### EXAMPLES:

- » Government tax breaks and credits
- » Clean air grants for organizations that sometimes cover the entire cost of the new electric fleet motorcycles
- » Special access to parking, lanes/roads and riding areas
- » Positive recognition from the public, politicians and government agencies
- » Free charging stations





*"I love electric motorcycles...they're the  
closest thing we have to a magic carpet."*

*Motorcycle.com*



## **ZERO MOTORCYCLES 2016 PRODUCT LINE ANNOUNCEMENT – AS SEEN IN ZERO MOTORCYCLES’ CORPORATE PRESS RELEASE**

SANTA CRUZ, Calif., (Oct. 15, 2015) – Zero Motorcycles, the global leader in the electric motorcycle industry, today unveiled their complete line of 2016 motorcycles. Following a record year in 2015, the California-based manufacturer promises to inspire an even broader range of riders with two new models, an innovative new motor design, faster charging and advanced lithium-ion cell chemistry powering the highest battery capacity and efficiency to date. Zero delivers even greater value by lowering the price on two base models while adding more features and performance throughout.

“2016 marks our tenth year of pioneering electric motorcycles,” said Zero Motorcycles CEO Richard Walker. “In an industry where sales are pretty flat and breakthrough innovations hard to find, we continue to experience rapid growth by investing in technology that delivers excitement and a ride experience unmatched by anything.”

The 2016 announcement began with the introduction of two new motorcycles, bringing Zero’s offering to six distinct models. The supermoto-inspired Zero FXS promises to turn mundane city streets into an urban playground. It features 70 ft-lb of torque, weighs less than 300 pounds and boasts components specifically tailored to provide exceptional control and responsiveness on the street. Adventure riders demanding maximum performance will enjoy the new Zero DSR. With 106 ft-lb of torque, the versatile dual sport is quick on the pavement and demonstrates greater prowess on dirt roads and trails.

“The 2016 line is the culmination of a decade of experience and leverages what we do best: create electric powertrains that deliver a thrilling ride,” said Abe Askenazi, Zero Motorcycles Chief Technology Officer. “The technology is sophisticated, but the way the power is delivered is simple and pure. Ride one, and you’ll understand why we are focused exclusively on electric motorcycles.”

Zero continues to advance state-of-the-art electric motorcycle technology with their signature Z-Force® powertrain. The new Z-Force® IPM (interior permanent magnet) motor produces power more efficiently, cools more rapidly and has higher thermal capability, which translates into significantly improved performance during hard riding and allows higher sustained top speeds. Power is delivered by Z-Force® power packs with optimized lithium-ion cell technology. The system boasts the highest energy density in the electric vehicle industry. Gains in capacity and efficiency have pushed the range up to 197 miles in the city and 98 miles on the highway (at 70 mph) with the optional Power Tank accessory.

Zero Motorcycles delivers the speed and convenience of Level 2 charging. With the new Charge Tank accessory, riders will be able to take advantage of the rapidly expanding network of public charging stations and charge three times faster. The Charge Tank works on the popular J1772 standard and effectively recharges a Zero in two to three hours.

Zero continues to set the benchmarks in performance, selection and range. As innovation enables the motorcycles to go farther and faster, they are also becoming easier to own.

“We set out to transform the two-wheeled experience for transportation and recreation, and a key part of that strategy is to make our motorcycles available to more people,” said Scot Harden, Zero Motorcycles VP of Global Marketing. “Investments in technology, our experience and continued growth allow us to lower the price of two of popular models, the Zero S ZF9.8 streetfighter and Zero DS ZF9.8 dual sport. The thrill of electric is more accessible than ever.”

Detailed specifications and prices are available at [www.zeromotorcycles.com](http://www.zeromotorcycles.com). New models arrive at authorized Zero Motorcycles dealers in November 2015. Motorcycle prices range from \$8,495 to \$15,995, depending upon model. The Charge Tank accessory is scheduled for delivery in spring 2016 and will have a suggested retail price of \$1,988. The range-extending Power Tank accessory is available now and lists for \$2,674.

# 2016 LAUNCH OVERVIEW

## WHAT'S NEW FOR 2016: A SUMMARY

Every year, Zero proudly introduces electric motorcycle innovations that redefine two-wheeled transportation and recreation. For 2016, Zero unleashes a pair of new high performance models, the Zero DSR and Zero FXS, and an all-new Z-Force® motor. Also, with a new fast-charging accessory that's compatible with Level 2 public chargers, riders are able to get back on the road three times faster, while new battery chemistry allows range to extend even farther. The thrill of electric has never been more accessible.



### ZERO DSR™

For the dual sport rider demanding more, Zero has added more torque, more power and more speed to the world's most versatile electric motorcycle.

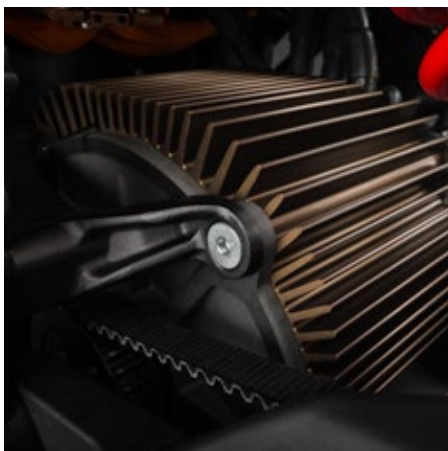
- » 25% more power than the Zero DS (67 hp)
- » 56% more torque than the Zero DS (106 ft-lb)
- » High output 660 amp motor controller
- » Z-Force® 75-7R interior permanent magnet (IPM) motor produces power more efficiently, cools more rapidly and has higher thermal capability
- » High-temperature motor magnets for even better performance during hard riding and at higher sustained speeds



### ZERO FXS™

The world's most entertaining electric motorcycle, the Zero FX, gets a full dose of supermoto style.

- » Zero FX specifically tuned to turn mundane city streets into a playground
- » Massive torque (70 ft-lb) in a lightweight package weighing under 300 lbs
- » Z-Force® 75-5 interior permanent magnet (IPM) motor produces power more efficiently, cools more rapidly and has higher thermal capability
- » Predictable, nimble handling
- » Extraordinary traction on asphalt from Pirelli Diablo Rosso II tires



### Z-FORCE® INTERIOR PERMANENT MAGNET (IPM) MOTOR

The heart of the Z-Force® powertrain features an all-new, more efficient and more robust design.

- » Produces power more efficiently
- » Cools more rapidly
- » Higher thermal capability significantly improves performance during hard riding and allows higher sustained top speeds
- » Appears on the following 2016 models: Zero DSR, Zero SR, Zero FXS, Zero S ZF13.0, Zero DS ZF13.0





### **3X FASTER, MORE ACCESSIBLE CHARGING**

The speed and convenience of Level 2 charging means less time charging and more time riding.

- » Charge Tank accessory effectively triples on-board charging speed
- » Designed for public Level 2 charging using the popular J1772 standard
- » ZF9.8 power packs can now be charged to 95% in about two hours, while the new higher capacity ZF13.0 takes about three hours
- » Complements standard on-board charger for a total of 3.8 kW of charging capacity
- » Up to 53 miles per hour of charging
- » Compatible with model year 2015 and later Zero SR, Zero S, Zero DSR and Zero DS models
- » Dealer-installed option



### **MORE ENERGY. LONGER RANGE.**

Advanced lithium-ion cell technology with optimized chemistry packs even more energy.

- » Range extended even further through new, more efficient cell chemistry on all new 2016 models
- » The Zero S and Zero SR now offer a range of up to 197 miles in the city and 98 miles on the highway (at 70 mph) using the Power Tank accessory
- » Highest energy density in the electric vehicle industry
- » 14% greater capacity and improved efficiency significantly extend range on Zero FX and Zero FXS
- » New Z-Force® power pack features 4% greater capacity and improved efficiency on Zero S, Zero SR, Zero DS and Zero DSR models



### **GREATER VALUE**

Riders looking to experience the thrill of electric will find 2016 models even easier to own.

- » The Zero S ZF9.8 is perfect for the urban commuter: light weight, super-efficient, fun, quick and quiet
- » At 381 lbs, the nimble Zero DS ZF9.8 dual sport is equally at home on pavement or dirt roads
- » Both 2016 models start at \$10,995 and can be customized with a wide variety of options and accessories

# 2016 ZERO S™ ZF9.8 AND ZERO DS™ ZF9.8



## MORE \$/MILES PER DOLLAR

Zero Motorcycles continues to be the industry leader in electric motorcycles, setting the benchmarks in performance and range. As innovations enable the motorcycles to go farther and faster, investments in technology make them easier than ever to own, a key part of Zero's strategy to bring more riders on board.

For the urban commuter interested in adding enjoyment to the daily grind or the dual sport rider who'd like to venture from the beaten path, Zero has created motorcycles that deliver all the thrill of electric at a fraction of the price.

Beyond offering an exceptional value to own, the ZF9.8 models are a blast to ride. The more compact power pack is significantly lighter, and that weight is carried lower. This means quicker acceleration and more nimble handling. Pro tip: the 0-60 time for a Zero S ZF9.8 is less than a second off of the mighty Zero SR with a Power Tank.

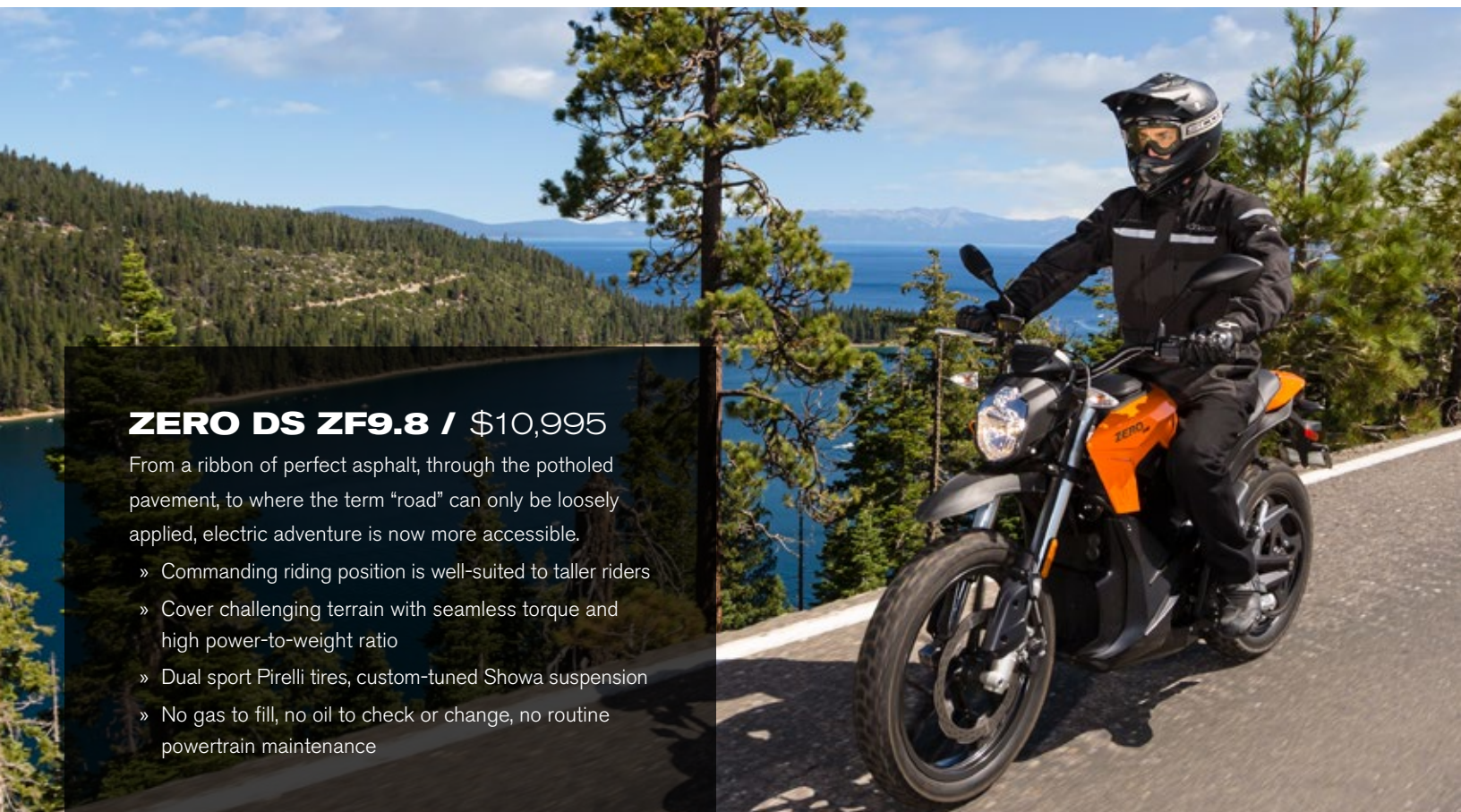




## **ZERO S ZF9.8 / \$10,995**

The average commute is under 25 miles, meaning the Zero S is ready to make your daily round trip faster, more affordable and—best of all—enjoyable.

- » Nimble and stable thanks to its low weight and instant torque
- » Quick acceleration, no clutch, always in the right gear
- » About a penny-per-mile in electricity to ride
- » No gas to fill, no oil to check or change, no routine powertrain maintenance



## **ZERO DS ZF9.8 / \$10,995**

From a ribbon of perfect asphalt, through the potholed pavement, to where the term “road” can only be loosely applied, electric adventure is now more accessible.

- » Commanding riding position is well-suited to taller riders
- » Cover challenging terrain with seamless torque and high power-to-weight ratio
- » Dual sport Pirelli tires, custom-tuned Showa suspension
- » No gas to fill, no oil to check or change, no routine powertrain maintenance





## MEET THE ZERO S

### GENERAL PRODUCT INFORMATION

Imagine instant torque and power from a standstill. Imagine smooth acceleration as you throttle out of turns. Then, imagine never needing to stop at a gas station or being burdened with any scheduled powertrain maintenance. Pure. Powerful. Electric... and available now.

Developed to aggressively take on urban environments while encouraging occasional detours to your favorite stretch of twisties, the Zero S integrates revolutionary technology with innovative design and premium equipment. The result is a motorcycle with breathtaking performance, a sophisticated appearance and refined ride characteristics.

Featuring Zero Motorcycles' Z-Force® motor and power pack, the Zero S pulls hard to speeds above 90 mph and offers a city range of up to 197 miles with the optional Power Tank accessory. Or, take advantage of public charging stations and get back on the road three times faster with the new Charge Tank accessory.

Whether stealthily accelerating onto the highway or through a series of turns, the Zero S is uniquely designed to deliver a thrilling sensation unlike any other on the road today. Are you ready?



## ZERO S™ AND ZERO SR™ – SUMMARY OF WHAT'S NEW

By constantly advancing the state of the art, the Zero S and Zero SR not only eliminate gasoline from your daily commute or weekend adventure, they transform into a motorcycle that's the closest thing to a magic carpet. For 2016, that magic carpet travels farther and can recharge three times faster.

At the heart of each Zero S ZF13.0 and Zero SR model is a new and innovative Z-Force® motor. Fundamentally redesigned, the interior permanent magnet (IPM) configuration produces power more efficiently, cools more rapidly and has greater thermal capabilities, significantly improving performance during hard riding and allowing higher sustained speeds.

To expand riding opportunities and provide access to the growing public charging infrastructure, Zero has effectively tripled charging speed with the new Charge Tank accessory. Leveraging the popular J1772 standard, the Charge Tank is designed to work with Level 2 charging stations. ZF9.8 power packs can now be charged to 95% in about two hours, while the new higher capacity ZF13.0 takes about three hours.

New cell chemistry within the Z-Force® power pack stores more energy and operates more efficiently, resulting in a system that boasts the highest energy density in the electric vehicle industry. This refinement, combined with the Power Tank, pushes the range of the Zero S (and Zero SR) to 197 miles in the city and 98 miles on the highway at 70 mph.

As Zero continues to raise the bar on its highest performance models, proven technology makes electric motorcycles even easier to own. With its impressive power-to-weight ratio, the 2016 Zero S ZF9.8 delivers the thrill and convenience of electric at a new lower price.

## PRICING AND WARRANTY

Manufacturer's Suggested Retail Price (MSRP\*)

2016	ZF9.8	ZF13.0	POWER TANK**	CHARGE TANK**
Zero S	\$10,995	\$13,995	\$2,674	\$1,988
Zero SR	N/A	\$15,995	\$2,674	\$1,988

\*\*As they occupy the same space, a Power Tank and Charge Tank may not be installed on the same motorcycle.

\*MSRP does not include shipping, applicable taxes, PDI, registration or dealer installation. Zero Motorcycles are available exclusively through authorized dealers. Dealer sets actual price. Government incentives may apply. Financing may be available to qualifying customers at participating dealers.

The 2016 Zero S and Zero SR arrive at North American dealerships in November 2015. Motorcycles come with a 2-year/unlimited mileage warranty and a 5-year/100,000-mile warranty on the power pack.

### ZERO S



### ZERO SR





## **MEET THE ZERO SR** GENERAL PRODUCT INFORMATION

The Zero SR shares the same DNA as the Zero S but is built for riders who simply want to go faster and accelerate harder. Featuring a larger 660 amp motor controller, the Zero SR delivers 25% more power (67 hp) and 56% more torque (106 ft-lb). To accommodate the increased output, its motor uses higher temperature magnets to ensure better performance during hard riding and extended periods at higher speeds.

With more torque than most 1000cc sport bikes, the Zero SR pulls hard off the line...and just keeps pulling. Launching from 0-60 mph in 3.3 seconds en route to a top speed over 100 mph, the Zero SR offers spirited riders an edge in competitive riding. From lap times at the local track day to sweeping the podium at the Pikes Peak International Hill Climb, the Zero SR is fundamentally changing the way electric motorcycles are perceived.



## PRODUCT UPGRADES

- **New Z-Force® IPM motor**
  - » Produces power more efficiently
  - » Cools more rapidly
  - » Higher thermal capability significantly improves performance during hard riding and allows higher sustained top speeds
  - » Featured on 2016 Zero S ZF13.0 and Zero SR models
- **Up to 197 miles in the city, 98 highway**
  - » Class leading range of up to 131 combined city/highway miles
  - » Increased energy capacity through optimization of lithium-ion cell chemistry
  - » Highest energy density battery in the electric vehicle industry
  - » Range extended even further through new, more efficient cell chemistry
- **The speed and convenience of Level 2 charging**
  - » Charge Tank accessory effectively triples on-board charging speed and opens new riding opportunities
  - » Designed for Level 2 charging and public charging stations using the popular J1772 standard
  - » New higher capacity ZF13.0 power pack can be recharged to 95% in about three hours
  - » Complements standard on-board charger for a total of 3.8 kW of charging capacity
  - » Up to 53 miles per hour of charging
  - » Dealer-installed option
- **Greater value with the Zero S ZF9.8**
  - » New low MSRP of \$10,995
  - » Lightweight, super-efficient, quick and quiet

## PRODUCT FEATURES

- » Highly efficient powertrain requires no routine maintenance or complex cooling systems
- » Z-Force® motor is designed from the ground up by Zero Motorcycles to be the world's most efficient, powerful, compact, brushless and sealed air-cooled motor
- » Z-Force® 75-7 motor produces 54 hp and 68 ft-lb of torque on the Zero S
- » Z-Force® 75-7R IPM motor produces 67 hp and 106 ft-lb of torque on the Zero SR
- » Sophisticatedly simple "just ride" direct-drive system means no clutch, no shifting and no need to carry a heavy and complex transmission
- » Custom riding mode setting allows riders to set their own performance profile in addition to the factory preset "sport" and "eco" riding modes (custom mode performance profile must be configured within the Zero Motorcycles app)
- » Zero Motorcycles App allows riders to adjust performance to enable sportier or more economical riding and provides detailed motorcycle statistics
- » Multiple configurations of 102 V power packs allow customers to select the range that best meets their needs: 9.8 kWh, 13.0 kWh or 15.9 kWh with optional Power Tank accessory
- » Life-of-motorcycle cell technology offers a high cycle life
- » Dual-level and adjustable regenerative braking
- » 1.3 kW on-board charger can be plugged into any household outlet and used in combination with the optional Quick Charger and/or Charge Tank accessories to reduce charge times at home, office or Level 2 charging stations
- » Refined aircraft-grade aluminum chassis features a twin spar design that's lightweight and torsionally rigid for precise handling and exceptional durability
- » Custom-tuned, fully adjustable Showa suspension improves comfort and control
- » Bosch anti-lock braking system improves control in a wide array of conditions and ensures the best braking performance
- » The Zero S features high performance Pirelli Sport Demon tires that combine excellent grip with long-lasting mileage
- » The Zero SR features softer compound Pirelli Diablo Rosso II tires for even greater traction
- » Stylish bodywork with aerodynamic chin fairing that improves powertrain cooling
- » High-contrast backlit LCD screen displaying state of charge, performance profile and other useful riding information
- » Integrated and lockable storage
- » LED tail light

# ZERO S™ AND ZERO SR™

## ZERO S » SPECIFICATIONS

	ZERO S ZF9.8	ZERO S ZF13.0	ZERO S ZF13.0 +POWER TANK
RANGE			
City	121 miles (195 km)	161 miles (259 km)	197 miles (317 km)
Highway, 55 mph (89 km/h)	74 miles (119 km)	98 miles (158 km)	120 miles (193 km)
» Combined	91 miles (146 km)	122 miles (196 km)	149 miles (240 km)
Highway, 70 mph (113 km/h)	61 miles (98 km)	81 miles (130 km)	98 miles (158 km)
» Combined	81 miles (130 km)	108 miles (174 km)	131 miles (211 km)
MOTOR			
Max torque	68 ft-lb (92 Nm)	68 ft-lb (92 Nm)	68 ft-lb (92 Nm)
Max power	54 hp (40 kW) @ 4,300 rpm	54 hp (40 kW) @ 4,300 rpm	54 hp (40 kW) @ 4,300 rpm
Top speed (max)	95 mph (153 km/h)	95 mph (153 km/h)	95 mph (153 km/h)
Top speed (sustained)	80 mph (129 km/h)	85 mph (137 km/h)	85 mph (137 km/h)
Acceleration, 0-60 mph (0-100 km/h)	4.8 seconds	5.2 seconds	5.8 seconds
Type	Z-Force® 75-7 passively air-cooled, high efficiency, radial flux, permanent magnet, brushless motor	Z-Force® 75-7 passively air-cooled, high efficiency, radial flux, interior permanent magnet, brushless motor	
Controller	High efficiency, 420 amp, 3-phase brushless controller with regenerative deceleration		
POWER SYSTEM			
Est. pack life to 80% (city)	272,000 miles (438,000 km)	362,000 miles (583,000 km)	443,000 miles (713,000 km)
Power pack	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent
Max capacity	9.8 kWh	13.0 kWh	15.9 kWh
Nominal capacity	8.6 kWh	11.4 kWh	14.0 kWh
Charger type	1.3 kW, integrated	1.3 kW, integrated	1.3 kW, integrated
Charge time (standard)	6.8 hours (100% charged) / 6.3 hours (95% charged)	8.9 hours (100% charged) / 8.4 hours (95% charged)	10.8 hours (100% charged) / 10.3 hours (95% charged)
» With Charge Tank accessory	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.4 hours (100% charged) / 2.9 hours (95% charged)	N/A
» With one accessory charger	4.0 hours (100% charged) / 3.5 hours (95% charged)	5.2 hours (100% charged) / 4.7 hours (95% charged)	6.3 hours (100% charged) / 5.8 hours (95% charged)
» With max accessory chargers	2.0 hours (100% charged) / 1.5 hours (95% charged)	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.0 hours (100% charged) / 2.5 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN			
Transmission	Clutchless direct drive	Clutchless direct drive	Clutchless direct drive
Final drive	130T / 28T, Poly Chain® GT® Carbon™ belt		
CHASSIS / SUSPENSION / BRAKES			
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping		
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping		
Front suspension travel	6.25 in (159 mm)	6.25 in (159 mm)	6.25 in (159 mm)
Rear suspension travel	6.35 in (161 mm)	6.35 in (161 mm)	6.35 in (161 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan asymmetric dual piston floating caliper, 320 x 5 mm disc		
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc		
Front tire	Pirelli Sport Demon 110/70-17	Pirelli Sport Demon 110/70-17	Pirelli Sport Demon 110/70-17
Rear tire	Pirelli Sport Demon 140/70-17	Pirelli Sport Demon 140/70-17	Pirelli Sport Demon 140/70-17
Front wheel	3.00 x 17	3.00 x 17	3.00 x 17
Rear wheel	3.50 x 17	3.50 x 17	3.50 x 17
DIMENSIONS			
Wheelbase	55.5 in (1,410 mm)	55.5 in (1,410 mm)	55.5 in (1,410 mm)
Seat height	31.8 in (807 mm)	31.8 in (807 mm)	31.8 in (807 mm)
Rake	24.0°	24.0°	24.0°
Trail	3.2 in (80 mm)	3.2 in (80 mm)	3.2 in (80 mm)
WEIGHT			
Frame	23 lb (10.4 kg)	23 lb (10.4 kg)	23 lb (10.4 kg)
Curb weight	376 lb (171 kg)	408 lb (185 kg)	452 lb (205 kg)
Carrying capacity	399 lb (181 kg)	367 lb (166 kg)	323 lb (147 kg)
ECONOMY			
Equivalent fuel economy (city)	475 MPGe (0.50 l/100 km)	475 MPGe (0.50 l/100 km)	475 MPGe (0.50 l/100 km)
Equivalent fuel economy (highway)	240 MPGe (0.98 l/100 km)	240 MPGe (0.98 l/100 km)	240 MPGe (0.98 l/100 km)
Typical cost to recharge	\$1.10	\$1.46	\$1.78



## ZERO SR » SPECIFICATIONS

ZERO SR ZF13.0		ZERO SR ZF13.0 +POWER TANK
RANGE		
City	161 miles (259 km)	197 miles (317 km)
Highway, 55 mph (89 km/h)	98 miles (158 km)	120 miles (193 km)
» Combined	122 miles (196 km)	149 miles (240 km)
Highway, 70 mph (113 km/h)	81 miles (130 km)	98 miles (158 km)
» Combined	108 miles (174 km)	131 miles (211 km)
MOTOR		
Max torque	106 ft-lb (144 Nm)	106 ft-lb (144 Nm)
Max power	67 hp (50 kW) @ 4,000 rpm	67 hp (50 kW) @ 4,000 rpm
Top speed (max)	102 mph (164 km/h)	102 mph (164 km/h)
Top speed (sustained)	95 mph (153 km/h)	95 mph (153 km/h)
Acceleration, 0-60 mph (0-100 km/h)	3.3 seconds	3.9 seconds
Type	Z-Force® 75-7R passively air-cooled, high efficiency, radial flux, interior permanent hi-temp magnet, brushless motor	
Controller	High efficiency, 660 amp, 3-phase brushless controller with regenerative deceleration	
POWER SYSTEM		
Est. pack life to 80% (city)	362,000 miles (583,000 km)	443,000 miles (713,000 km)
Power pack	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent
Max capacity	13.0 kWh	15.9 kWh
Nominal capacity	11.4 kWh	14.0 kWh
Charger type	1.3 kW, integrated	1.3 kW, integrated
Charge time (standard)	8.9 hours (100% charged) / 8.4 hours (95% charged)	10.8 hours (100% charged) / 10.3 hours (95% charged)
» With Charge Tank accessory	3.4 hours (100% charged) / 2.9 hours (95% charged)	N/A
» With one accessory charger	5.2 hours (100% charged) / 4.7 hours (95% charged)	6.3 hours (100% charged) / 5.8 hours (95% charged)
» With max accessory chargers	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.0 hours (100% charged) / 2.5 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN		
Transmission	Clutchless direct drive	Clutchless direct drive
Final drive	130T / 30T, Poly Chain® GT® Carbon™ belt	130T / 30T, Poly Chain® GT® Carbon™ belt
CHASSIS / SUSPENSION / BRAKES		
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping	
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping	
Front suspension travel	6.25 in (159 mm)	6.25 in (159 mm)
Rear suspension travel	6.35 in (161 mm)	6.35 in (161 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan asymmetric dual piston floating caliper, 320 x 5 mm disc	
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc	
Front tire	Pirelli Diablo Rosso II 110/70-17	Pirelli Diablo Rosso II 110/70-17
Rear tire	Pirelli Diablo Rosso II 140/70-17	Pirelli Diablo Rosso II 140/70-17
Front wheel	3.00 x 17	3.00 x 17
Rear wheel	3.50 x 17	3.50 x 17
DIMENSIONS		
Wheelbase	55.5 in (1,410 mm)	55.5 in (1,410 mm)
Seat height	31.8 in (807 mm)	31.8 in (807 mm)
Rake	24.0°	24.0°
Trail	3.2 in (80 mm)	3.2 in (80 mm)
WEIGHT		
Frame	23 lb (10.4 kg)	23 lb (10.4 kg)
Curb weight	414 lb (188 kg)	458 lb (208 kg)
Carrying capacity	361 lb (164 kg)	317 lb (144 kg)
ECONOMY		
Equivalent fuel economy (city)	475 MPGe (0.50 l/100 km)	475 MPGe (0.50 l/100 km)
Equivalent fuel economy (highway)	240 MPGe (0.98 l/100 km)	240 MPGe (0.98 l/100 km)
Typical cost to recharge	\$1.46	\$1.78



## MEET THE ZERO DS GENERAL PRODUCT INFORMATION

The Zero DS combines innovation with passion to deliver the world's most versatile electric motorcycle. Designed to be agile in the dirt and quick on the street, the Zero DS represents a new kind of freedom.

Blast down a gravel road or a dusty trail. When you're ready, stealthily pass from the wild to the civilized as you arrive at your destination. The Zero DS is tough when you demand it and distinguished where required. Choose from the Power Tank or Charge Tank accessories to extend your range or take advantage of three times faster charging.

Propelled by the most advanced technology in the industry, the Zero DS is a fully electric motorcycle that can handle any surface you throw at it. Overcoming obstacles and maintaining control is effortless due to its direct-drive, fully adjustable Showa suspension and rugged wheel set. Under technical riding conditions, Zero's revolutionary Z-Force® motor delivers astonishing responsiveness with the twist of your wrist. As with Zero's entire model line, the Zero DS offers a liberating ownership experience with its maintenance-free powertrain, penny-per-mile "fuel" cost and powerful acceleration.



## ZERO DS™ AND ZERO DSR™ – SUMMARY OF WHAT'S NEW

Years of refinement have made Zero's versatile dual sport motorcycles even more dynamic. Smooth and stylish in the city—yet capable and robust off-road—owning a Zero DS or Zero DSR is like having two bikes in one. And, for 2016, technological advancements will have you rolling faster and riding farther.

At the heart of each Zero DS ZF13.0 and Zero DSR is an all-new Z-Force® motor. Its innovative interior permanent magnet (IPM) design cools more rapidly and has greater thermal capabilities. Performance is substantially improved in demanding conditions, both on- and off-road, and higher sustained top speeds are achieved.

Zero has effectively tripled the speed of charging. Thanks to the new Charge Tank accessory, mid-adventure recharging can now be done over a leisurely lunch break. The Charge Tank is designed to work with Level 2 charging stations using the popular J1772 standard and allows riders to take advantage of the rapidly expanding network of public charging stations. ZF9.8 power packs can now be charged to 95% in about two hours, while the new higher capacity ZF13.0 takes about three hours.

Zero extends their lead further in battery technology. The new Z-Force® ZF13.0 power pack boasts the highest energy density in the electric vehicle industry. While packing more power in the same amount of space, improved cell chemistry operates more efficiently and increases range. Combined with the Power Tank accessory, the Zero DS and Zero DSR can travel up to 179 miles in the city or 86 on the highway. Longer adventures await.

As technology advances with the highest performance motorcycles, proven systems have allowed Zero to deliver even greater value on the base model. The quick accelerating, highly versatile and remarkably easy-to-ride 2016 Zero DS ZF9.8 delivers all the thrill of electric at a new lower price.

## PRICING AND WARRANTY

Manufacturer's Suggested Retail Price (MSRP\*)

2016	ZF9.8	ZF13.0	POWER TANK**	CHARGE TANK**
Zero DS	\$10,995	\$13,995	\$2,674	\$1,988
Zero DSR	N/A	\$15,995	\$2,674	\$1,988

\*\*As they occupy the same space, a Power Tank and Charge Tank may not be installed on the same motorcycle.

\*MSRP does not include shipping, applicable taxes, PDI, registration or dealer installation. Zero Motorcycles are available exclusively through authorized dealers. Dealer sets actual price. Government incentives may apply. Financing may be available to qualifying customers at participating dealers.

The 2016 Zero DS and Zero DSR arrive at North American dealerships in November 2015. Motorcycles come with a 2-year/unlimited mileage warranty and a 5-year/100,000-mile warranty on the power pack.

### ZERO DS



### ZERO DSR







## **INTRODUCING THE ZERO DSR** MORE POWER. MORE TORQUE. MAX ADVENTURE.

The Zero DSR is an amped-up version of the Zero DS, bringing unprecedented levels of power and torque to the world's most versatile electric motorcycle. For the dual sport rider demanding more, the Zero DSR delivers 56% more torque and 25% more power. A 660 amp controller is paired with a Z-Force® motor that contains higher temperature magnets to ensure better performance during extended durations at higher speeds. The result is exhilarating acceleration and even greater prowess off-road.

With a 0-60 time of 3.9 seconds and 106 ft-lb of torque on demand, the Zero DSR may be civilized but is by no means subdued. With custom-tuned Showa suspension and Bosch ABS, it is equally at home on pavement and dirt. The Zero DSR is more than ready for maximum adventure...whether it's in the city or places beyond.



## PRODUCT UPGRADES

- **New Z-Force® IPM motor**
  - » Produces power more efficiently
  - » Cools more rapidly
  - » Higher thermal capability significantly improves performance during hard riding and allows higher sustained top speeds
  - » Featured on 2016 Zero DS ZF13.0 and Zero DSR models
- **The speed and convenience of Level 2 charging**
  - » Charge Tank accessory effectively triples on-board charging speed and opens new riding opportunities
  - » Designed for Level 2 charging and public charging stations using the popular J1772 standard
  - » New higher capacity ZF13.0 power pack can be recharged to 95% in about three hours
  - » Complements standard on-board charger for a total of 3.8 kW of charging capacity
  - » Up to 49 miles per hour of charging
- » Dealer-installed option
- **Longer adventures with increased range**
  - » Class leading range of up to 116 combined city/highway miles
  - » Increased energy capacity through optimization of lithium-ion cell chemistry
  - » Highest energy density battery in the electric vehicle industry
  - » Range extended even further through new, more efficient cell chemistry
- **Improved ergonomics**
  - » Taller rise handlebar provides more assertive riding position and improved leverage
  - » Better modulation and increased comfort thanks to new rear brake pedal
- **Greater value with the Zero DS ZF9.8**
  - » New low MSRP of \$10,995
  - » Lightweight, super-efficient, quick and quiet

## PRODUCT FEATURES

- » Highly efficient powertrain requires no routine maintenance or complex cooling systems
- » Z-Force® motor is designed from the ground up by Zero Motorcycles to be the world's most efficient, powerful, compact, brushless and sealed air-cooled motor
- » Z-Force® 75-7 motor produces 54 hp and 68 ft-lb of torque on the Zero DS
- » Z-Force® 75-7R IPM motor produces 67 hp and 106 ft-lb of torque on the Zero DSR
- » Sophisticatedly simple "just ride" direct-drive system means no clutch, no shifting and no need to carry a heavy and complex transmission
- » Custom riding mode setting allows riders to set their own performance profile in addition to the factory preset "sport" and "eco" riding modes (custom mode performance profile must be configured within the Zero Motorcycles app)
- » Zero Motorcycles App allows riders to adjust performance to enable sportier or more economical riding and provides detailed motorcycle statistics
- » Multiple configurations of 102 V power packs allow customers to select the range that best meets their needs: 9.8 kWh, 13.0 kWh or 15.9 kWh with optional Power Tank accessory
- » Life-of-motorcycle cell technology offers a high cycle life
- » Dual-level and adjustable regenerative braking
- » 1.3 kW on-board charger can be plugged into any household outlet and used in combination with the optional Quick Charger and/or Charge Tank accessories to reduce charge times at home or office
- » Refined aircraft-grade aluminum chassis features a twin spar design that's lightweight and torsionally rigid for precise handling and exceptional durability
- » Custom-tuned, fully adjustable Showa suspension improves comfort and control on- and off-road
- » Bosch anti-lock braking system improves control in a wide array of conditions and ensures the best braking performance
- » Versatile Pirelli MT-60 tires offer excellent traction in both on- and off-road conditions, superb cornering and straight line stability and wet weather performance
- » Stylish bodywork with aerodynamic chin fairing that improves powertrain cooling
- » High-contrast backlit LCD screen displaying state of charge, performance profile and other useful riding information
- » Integrated and lockable storage
- » LED tail light

# ZERO DS™ AND ZERO DSR™

## ZERO DS » SPECIFICATIONS

	ZERO DS ZF9.8	ZERO DS ZF13.0	ZERO DS ZF13.0 +POWER TANK
RANGE			
City	110 miles (177 km)	147 miles (237 km)	179 miles (288 km)
Highway, 55 mph (89 km/h)	66 miles (106 km)	88 miles (142 km)	107 miles (172 km)
» Combined	83 miles (134 km)	110 miles (177 km)	134 miles (216 km)
Highway, 70 mph (113 km/h)	53 miles (85 km)	70 miles (113 km)	86 miles (138 km)
» Combined	71 miles (114 km)	95 miles (153 km)	116 miles (187 km)
MOTOR			
Max torque	68 ft-lb (92 Nm)	68 ft-lb (92 Nm)	68 ft-lb (92 Nm)
Max power	54 hp (40 kW) @ 4,300 rpm	54 hp (40 kW) @ 4,300 rpm	54 hp (40 kW) @ 4,300 rpm
Top speed (max)	98 mph (158 km/h)	98 mph (158 km/h)	98 mph (158 km/h)
Top speed (sustained)	80 mph (129 km/h)	85 mph (137 km/h)	85 mph (137 km/h)
Acceleration, 0-60 mph (0-100 km/h)	5.2 seconds	5.7 seconds	6.4 seconds
Type	Z-Force® 75-7 passively air-cooled, high efficiency, radial flux, permanent magnet, brushless motor	Z-Force® 75-7 passively air-cooled, high efficiency, radial flux, interior permanent magnet, brushless motor	
Controller	High efficiency, 420 amp, 3-phase brushless controller with regenerative deceleration		
POWER SYSTEM			
Est. pack life to 80% (city)	248,000 miles (399,000 km)	331,000 miles (533,000 km)	403,000 miles (649,000 km)
Power pack	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent
Max capacity	9.8 kWh	13.0 kWh	15.9 kWh
Nominal capacity	8.6 kWh	11.4 kWh	14.0 kWh
Charger type	1.3 kW, integrated	1.3 kW, integrated	1.3 kW, integrated
Charge time (standard)	6.8 hours (100% charged) / 6.3 hours (95% charged)	8.9 hours (100% charged) / 8.4 hours (95% charged)	10.8 hours (100% charged) / 10.3 hours (95% charged)
» With Charge Tank accessory	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.4 hours (100% charged) / 2.9 hours (95% charged)	N/A
» With one accessory charger	4.0 hours (100% charged) / 3.5 hours (95% charged)	5.2 hours (100% charged) / 4.7 hours (95% charged)	6.3 hours (100% charged) / 5.8 hours (95% charged)
» With max accessory chargers	2.0 hours (100% charged) / 1.5 hours (95% charged)	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.0 hours (100% charged) / 2.5 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN			
Transmission	Clutchless direct drive	Clutchless direct drive	Clutchless direct drive
Final drive	130T / 28T, Poly Chain® GT® Carbon™ belt		
CHASSIS / SUSPENSION / BRAKES			
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping		
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping		
Front suspension travel	7.00 in (178 mm)	7.00 in (178 mm)	7.00 in (178 mm)
Rear suspension travel	7.03 in (179 mm)	7.03 in (179 mm)	7.03 in (179 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan asymmetric dual piston floating caliper, 320 x 5 mm disc		
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc		
Front tire	Pirelli MT-60 100/90-19	Pirelli MT-60 100/90-19	Pirelli MT-60 100/90-19
Rear tire	Pirelli MT-60 130/80-17	Pirelli MT-60 130/80-17	Pirelli MT-60 130/80-17
Front wheel	2.50 x 19	2.50 x 19	2.50 x 19
Rear wheel	3.50 x 17	3.50 x 17	3.50 x 17
DIMENSIONS			
Wheelbase	56.2 in (1,427 mm)	56.2 in (1,427 mm)	56.2 in (1,427 mm)
Seat height	33.2 in (843 mm)	33.2 in (843 mm)	33.2 in (843 mm)
Rake	26.5°	26.5°	26.5°
Trail	4.6 in (117 mm)	4.6 in (117 mm)	4.6 in (117 mm)
WEIGHT			
Frame	23 lb (10.4 kg)	23 lb (10.4 kg)	23 lb (10.4 kg)
Curb weight	381 lb (173 kg)	413 lb (187 kg)	457 lb (207 kg)
Carrying capacity	394 lb (179 kg)	362 lb (164 kg)	318 lb (144 kg)
ECONOMY			
Equivalent fuel economy (city)	435 MPGe (0.54 l/100 km)	435 MPGe (0.54 l/100 km)	435 MPGe (0.54 l/100 km)
Equivalent fuel economy (highway)	210 MPGe (1.12 l/100 km)	210 MPGe (1.12 l/100 km)	210 MPGe (1.12 l/100 km)
Typical cost to recharge	\$1.10	\$1.46	\$1.78



## ZERO DSR » SPECIFICATIONS

ZERO DSR ZF13.0		ZERO DSR ZF13.0 +POWER TANK
RANGE		
City	147 miles (237 km)	179 miles (288 km)
Highway, 55 mph (89 km/h)	88 miles (142 km)	107 miles (172 km)
» Combined	110 miles (177 km)	134 miles (216 km)
Highway, 70 mph (113 km/h)	70 miles (113 km)	86 miles (138 km)
» Combined	95 miles (153 km)	116 miles (187 km)
MOTOR		
Max torque	106 ft-lb (144 Nm)	106 ft-lb (144 Nm)
Max power	67 hp (50 kW) @ 4,000 rpm	67 hp (50 kW) @ 4,000 rpm
Top speed (max)	98 mph (158 km/h)	98 mph (158 km/h)
Top speed (sustained)	90 mph (145 km/h)	90 mph (145 km/h)
Acceleration, 0-60 mph (0-100 km/h)	3.9 seconds	4.5 seconds
Type	Z-Force® 75-7R passively air-cooled, high efficiency, radial flux, interior permanent hi-temp magnet, brushless motor	
Controller	High efficiency, 660 amp, 3-phase brushless controller with regenerative deceleration	
POWER SYSTEM		
Est. pack life to 80% (city)	331,000 miles (533,000 km)	403,000 miles (649,000 km)
Power pack	Z-Force® Li-Ion intelligent	Z-Force® Li-Ion intelligent
Max capacity	13.0 kWh	15.9 kWh
Nominal capacity	11.4 kWh	14.0 kWh
Charger type	1.3 kW, integrated	1.3 kW, integrated
Charge time (standard)	8.9 hours (100% charged) / 8.4 hours (95% charged)	10.8 hours (100% charged) / 10.3 hours (95% charged)
» With Charge Tank accessory	3.4 hours (100% charged) / 2.9 hours (95% charged)	N/A
» With one accessory charger	5.2 hours (100% charged) / 4.7 hours (95% charged)	6.3 hours (100% charged) / 5.8 hours (95% charged)
» With max accessory chargers	2.6 hours (100% charged) / 2.1 hours (95% charged)	3.0 hours (100% charged) / 2.5 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN		
Transmission	Clutchless direct drive	Clutchless direct drive
Final drive	130T / 28T, Poly Chain® GT® Carbon™ belt	130T / 28T, Poly Chain® GT® Carbon™ belt
CHASSIS / SUSPENSION / BRAKES		
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping	
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping	
Front suspension travel	7.00 in (178 mm)	7.00 in (178 mm)
Rear suspension travel	7.03 in (179 mm)	7.03 in (179 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan asymmetric dual piston floating caliper, 320 x 5 mm disc	
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc	
Front tire	Pirelli MT-60 100/90-19	Pirelli MT-60 100/90-19
Rear tire	Pirelli MT-60 130/80-17	Pirelli MT-60 130/80-17
Front wheel	2.50 x 19	2.50 x 19
Rear wheel	3.50 x 17	3.50 x 17
DIMENSIONS		
Wheelbase	56.2 in (1,427 mm)	56.2 in (1,427 mm)
Seat height	33.2 in (843 mm)	33.2 in (843 mm)
Rake	26.5°	26.5°
Trail	4.6 in (117 mm)	4.6 in (117 mm)
WEIGHT		
Frame	23 lb (10.4 kg)	23 lb (10.4 kg)
Curb weight	419 lb (190 kg)	463 lb (210 kg)
Carrying capacity	356 lb (161 kg)	312 lb (142 kg)
ECONOMY		
Equivalent fuel economy (city)	435 MPGe (0.54 l/100 km)	435 MPGe (0.54 l/100 km)
Equivalent fuel economy (highway)	210 MPGe (1.12 l/100 km)	210 MPGe (1.12 l/100 km)
Typical cost to recharge	\$1.46	\$1.78



## **MEET THE ZERO FX AND INTRODUCING THE ZERO FXS** GENERAL PRODUCT INFORMATION

If you're only as good as your reputation, then the Zero FX and Zero FXS are in great standing. The dynamic Zero FX has been described as the world's most entertaining electric motorcycle. Its supermoto-inspired sibling, the Zero FXS, focuses all of that fun on the street. You've never experienced power and freedom like this. All those things you wished you could get away with...they just became possible. The old saying, "Absolute power corrupts absolutely", was never truer than with this pair of stealthfighters.

Equally at home on- or off-road, the Zero FX tempts you to ride on any terrain that crosses your path with a chassis that hails from Zero Motorcycles' championship-winning off-road heritage. The Zero FXS takes all of that technology and pairs it with components tailor-made for urban antics.

Both bikes deliver a nearly instantaneous 70 ft-lb of torque, up to 44 hp and weigh less than 300 lbs. Equipped with a maintenance-free powertrain, belt drive and fully modular power pack system, no riding time is wasted and each mile ridden only costs around a penny in electricity.

The Zero FX and Zero FXS take any type of riding to bold new levels. Stealthily ride at any hour of the day or night on a motorcycle that distills riding into its most basic and adrenaline-pumping elements.



## ZERO FX™ AND ZERO FXS™ – SUMMARY OF WHAT’S NEW

Owning a Zero FX or Zero FXS is like having your own personal amusement park ride. For 2016, the ride got even longer and more fun.

New cell chemistry within the patented modular and removable Z-Force® power pack allows 14% more energy to be stored in the same amount of space and operate more efficiently, resulting in a system that boasts the highest energy density in the electric vehicle industry.

Ergonomics have also been improved—especially off-road—with new taller rise handlebars for increased leverage and an optimized rear brake pedal that provides better modulation.

## PRICING AND WARRANTY

Manufacturer's Suggested Retail Price (MSRP\*)

2016	ZF3.3	ZF6.5
Zero FX	\$8,495	\$10,990
Zero FXS	\$8,495	\$10,990

\*MSRP does not include shipping, applicable taxes, PDI, registration or dealer installation. Zero Motorcycles are available exclusively through authorized dealers. Dealer sets actual price. Government incentives may apply. Financing may be available to qualifying customers at participating dealers.

The 2016 Zero FX and Zero FXS arrive at North American dealerships in November 2015. Motorcycles come with a 2-year/unlimited mileage warranty and a 5-year/50,000-mile warranty on the power pack.

### ZERO FX



### ZERO FXS





## MEET THE ZERO FXS GENERAL PRODUCT INFORMATION

Whether you're charging through the inner city supermoto style or indulging in backroad shenanigans, the new Zero FXS is ready to push the limits. Delivering a nearly instantaneous 70 ft-lb of torque, up to 44 hp and weighing less than 300 lbs, the Zero FXS is quick and agile. Suspension and brakes are ideally suited to the rigors of spirited riding, giving the rider greater control. 17-inch wheels and Pirelli Diablo Rosso tires provide superior grip and corner control...for good reason: the throttle response is simply stunning. The Zero FXS takes supermoto to a new level. Think of it as supermoto on steroids.

No ride time is wasted thanks to its maintenance-free powertrain, and each mile covered costs only around a penny in electricity. The Zero FXS features a unique, patented modular power pack system that allows recharging either on or off the bike, making it ideal for the city. With advanced ABS, fully adjustable suspension, dual projector beam headlights, alloy wheels and high-performance street tires, it's ready to hit the supermoto track or turn formerly mundane tasks into thrilling rides.



## PRODUCT UPGRADES

- **New Z-Force® IPM motor (Zero FXS)**

- » Produces power more efficiently
- » Cools more rapidly
- » Higher thermal capability significantly improves performance during hard riding and allows higher sustained top speeds
- » Featured on 2016 Zero FXS models

- **New power packs deliver longer rides**

- » 14% increase in energy capacity through optimization of lithium-ion cell chemistry
- » Highest energy density battery in the electric vehicle industry
- » Range extended even further through new, more efficient cell chemistry

- **Improved ergonomics**

- » Taller rise handlebar provides more assertive riding position and improved leverage
- » Better modulation and increased comfort thanks to new rear brake pedal

## PRODUCT FEATURES

- » Fully modular Z-Force® quick-swap technology allows riders to easily upgrade from 3.3 kWh (max) to 6.5 kWh (max) in seconds
- » Removable power pack modules can be charged on the motorcycle using the standard charger, off-board with optional accessories and swapped in and out regardless of individual state of charge
- » Highly efficient powertrain requires no routine maintenance or complex cooling systems
- » Z-Force® motor is designed from the ground up by Zero Motorcycles to be the world's most efficient, powerful, compact, brushless and sealed air-cooled motor
- » Z-Force® 75-5 motor produces 27 hp and 70 ft-lb of torque on the Zero FX and Zero FXS ZF3.3
- » Z-Force® 75-5 motor produces 44 hp and 70 ft-lb of torque on the Zero FX and Zero FXS ZF6.5
- » Sophisticatedly simple "just ride" direct-drive system means no clutch, no shifting and no need to carry a heavy and complex transmission
- » Custom riding mode setting allows riders to set their own performance profile in addition to the factory preset "sport" and "eco" riding modes (custom mode performance profile must be configured within the Zero Motorcycles app)
- » Zero Motorcycles App allows riders to adjust performance to enable sportier or more economical riding and provides detailed motorcycle statistics
- » Life-of-motorcycle cell technology offers a high cycle life
- » Dual-level and adjustable regenerative braking
- » 650W onboard charger can be plugged into any household outlet and used in combination with the optional Quick Charger accessory to reduce charge times at home or office
- » Custom-tuned, fully adjustable Showa suspension improves comfort and control
- » Bosch anti-lock braking system improves control in a wide array of conditions and ensures the best braking performance
- » The Zero FX features dynamic Pirelli Scorpion MT-90 tires that offer high performance from daily urban use to weekend off-road adventure
- » The Zero FXS features softer compound Pirelli Diablo Rosso II tires for superb traction on pavement
- » Dual projector beam headlights and integrated fly screen provide a refined and contemporary front profile
- » High-contrast backlit LCD screen displaying state of charge, performance profile and other useful riding information

# ZERO FX™ AND ZERO FXS™

## ZERO FX » SPECIFICATIONS

ZERO FX ZF3.3		ZERO FX ZF6.5
RANGE		
City	41 miles (66 km)	82 miles (132 km)
Highway, 55 mph (89 km/h)	25 miles (40 km)	50 miles (80 km)
» Combined	31 miles (50 km)	62 miles (100 km)
Highway, 70 mph (113 km/h)	17 miles (27 km)	35 miles (56 km)
» Combined	24 miles (39 km)	49 miles (79 km)
MOTOR		
Max torque	70 ft-lb (95 Nm)	70 ft-lb (95 Nm)
Max power	27 hp (20 kW) @ 3,700 rpm	44 hp (33 kW) @ 3,700 rpm
Top speed (max)	85 mph (137 km/h)	85 mph (137 km/h)
Top speed (sustained)	70 mph (113 km/h)	70 mph (113 km/h)
Acceleration, 0-60 mph (0-100 km/h)	4.3 seconds	4.0 seconds
Type	Z-Force® 75-5 passively air-cooled, high efficiency, radial flux, permanent magnet, brushless motor	
Controller	High efficiency, 420 amp, 3-phase brushless controller with regenerative deceleration	
POWER SYSTEM		
Est. pack life to 80% (city)	92,000 miles (148,000 km)	185,000 miles (298,000 km)
Power pack	Z-Force® Li-Ion intelligent modular	Z-Force® Li-Ion intelligent modular
Max capacity	3.3 kWh	6.5 kWh
Nominal capacity	2.9 kWh	5.7 kWh
Charger type	650 W, integrated	650 W, integrated
Charge time (standard)	4.7 hours (100% charged) / 4.2 hours (95% charged)	8.9 hours (100% charged) / 8.4 hours (95% charged)
» With one accessory charger	2.1 hours (100% charged) / 1.6 hours (95% charged)	3.8 hours (100% charged) / 3.3 hours (95% charged)
» With max accessory chargers	1.5 hours (100% charged) / 1.0 hour (95% charged)	1.7 hours (100% charged) / 1.2 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN		
Transmission	Clutchless direct drive	Clutchless direct drive
Final drive	132T / 25T, Poly Chain® GT® Carbon™ belt	132T / 25T, Poly Chain® GT® Carbon™ belt
CHASSIS / SUSPENSION / BRAKES		
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping	
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping	
Front suspension travel	8.60 in (218 mm)	8.60 in (218 mm)
Rear suspension travel	8.94 in (227 mm)	8.94 in (227 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan dual piston floating caliper, 240 x 4.5 mm disc	
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc	
Front tire	Pirelli Scorpion MT 90 A/T 90/90-21	Pirelli Scorpion MT 90 A/T 90/90-21
Rear tire	Pirelli Scorpion MT 90 A/T 120/80-18	Pirelli Scorpion MT 90 A/T 120/80-18
Front wheel	1.85 x 21	1.85 x 21
Rear wheel	2.50 x 18	2.50 x 18
DIMENSIONS		
Wheelbase	56.6 in (1,438 mm)	56.6 in (1,438 mm)
Seat height	34.7 in (881 mm)	34.7 in (881 mm)
Rake	25.4°	25.4°
Trail	4.1 in (104 mm)	4.1 in (104 mm)
WEIGHT		
Frame	20 lb (9.1 kg)	20 lb (9.1 kg)
Curb weight	247 lb (112 kg)	289 lb (131 kg)
Carrying capacity	383 lb (174 kg)	341 lb (155 kg)
ECONOMY		
Equivalent fuel economy (city)	485 MPGe (0.48 l/100 km)	485 MPGe (0.48 l/100 km)
Equivalent fuel economy (highway)	205 MPGe (1.15 l/100 km)	205 MPGe (1.15 l/100 km)
Typical cost to recharge	\$0.37	\$0.73



## ZERO FXS » SPECIFICATIONS

ZERO FXS ZF3.3		ZERO FXS ZF6.5
RANGE		
City	45 miles (72 km)	90 miles (145 km)
Highway, 55 mph (89 km/h)	27 miles (43 km)	54 miles (87 km)
» Combined	34 miles (55 km)	68 miles (109 km)
Highway, 70 mph (113 km/h)	18 miles (29 km)	37 miles (60 km)
» Combined	26 miles (42 km)	52 miles (84 km)
MOTOR		
Max torque	70 ft-lb (95 Nm)	70 ft-lb (95 Nm)
Max power	27 hp (20 kW) @ 3,700 rpm	44 hp (33 kW) @ 3,700 rpm
Top speed (max)	82 mph (132 km/h)	82 mph (132 km/h)
Top speed (sustained)	75 mph (121 km/h)	75 mph (121 km/h)
Acceleration, 0-60 mph (0-100 km/h)	4.1 seconds	3.8 seconds
Type	Z-Force® 75-5 passively air-cooled, high efficiency, radial flux, interior permanent magnet, brushless motor	
Controller	High efficiency, 420 amp, 3-phase brushless controller with regenerative deceleration	
POWER SYSTEM		
Est. pack life to 80% (city)	101,000 miles (163,000 km)	203,000 miles (327,000 km)
Power pack	Z-Force® Li-Ion intelligent modular	Z-Force® Li-Ion intelligent modular
Max capacity	3.3 kWh	6.5 kWh
Nominal capacity	2.9 kWh	5.7 kWh
Charger type	650 W, integrated	650 W, integrated
Charge time (standard)	4.7 hours (100% charged) / 4.2 hours (95% charged)	8.9 hours (100% charged) / 8.4 hours (95% charged)
» With one accessory charger	2.1 hours (100% charged) / 1.6 hours (95% charged)	3.8 hours (100% charged) / 3.3 hours (95% charged)
» With max accessory chargers	1.5 hours (100% charged) / 1.0 hour (95% charged)	1.7 hours (100% charged) / 1.2 hours (95% charged)
Input	Standard 110 V or 220 V	Standard 110 V or 220 V
DRIVETRAIN		
Transmission	Clutchless direct drive	Clutchless direct drive
Final drive	132T / 25T, Poly Chain® GT® Carbon™ belt	132T / 25T, Poly Chain® GT® Carbon™ belt
CHASSIS / SUSPENSION / BRAKES		
Front suspension	Showa 41 mm inverted cartridge forks, with adjustable spring preload, compression and rebound damping	
Rear suspension	Showa 40 mm piston, piggy-back reservoir shock with adjustable spring preload, compression and rebound damping	
Front suspension travel	7.00 in (178 mm)	7.00 in (178 mm)
Rear suspension travel	8.94 in (227 mm)	8.94 in (227 mm)
Front brakes	Bosch Gen 9 ABS, J-Juan asymmetric dual piston floating caliper, 320 x 5 mm disc	
Rear brakes	Bosch Gen 9 ABS, J-Juan single piston floating caliper, 240 x 4.5 mm disc	
Front tire	Pirelli Diablo Rosso II 110/70-17	Pirelli Diablo Rosso II 110/70-17
Rear tire	Pirelli Diablo Rosso II 140/70-17	Pirelli Diablo Rosso II 140/70-17
Front wheel	3.00 x 17	3.00 x 17
Rear wheel	3.50 x 17	3.50 x 17
DIMENSIONS		
Wheelbase	56.0 in (1,422 mm)	56.0 in (1,422 mm)
Seat height	32.9 in (836 mm)	32.9 in (836 mm)
Rake	24.4°	24.4°
Trail	2.8 in (71 mm)	2.8 in (71 mm)
WEIGHT		
Frame	20 lb (9.1 kg)	20 lb (9.1 kg)
Curb weight	251 lb (114 kg)	293 lb (133 kg)
Carrying capacity	379 lb (172 kg)	337 lb (153 kg)
ECONOMY		
Equivalent fuel economy (city)	530 MPGe (0.44 l/100 km)	530 MPGe (0.44 l/100 km)
Equivalent fuel economy (highway)	215 MPGe (1.09 l/100 km)	215 MPGe (1.09 l/100 km)
Typical cost to recharge	\$0.37	\$0.73



## POLICE AND SECURITY MOTORCYCLES PROGRAM OVERVIEW

Zero Motorcycles offers a range of police and security models with customizable options to meet the specific needs of a wide variety of patrol applications. More than 60 government agencies from the USA, Europe, South America and Asia have integrated Zero Motorcycles into their patrol fleets.

With the ability to cover both on- and off-road areas, Zero Motorcycles police and security models present unique advantages over internal combustion driven machines. They are highly maneuverable and ideal for patrolling a diverse range of areas: urban centers, city streets, tight quarters, parks, beaches and dirt trails. The 100% electric powertrain is nearly silent, exhaust free, produces minimal heat, has instant torque from 0 rpm and is essentially maintenance-free.

With a “fuel” cost of about a penny-per-mile and maintenance cost reductions of up to 85%, a patrol fleet of Zero motorcycles saves police and security agencies time and money, while providing a tactical advantage. In certain regions, grants and incentives may be available specifically for both public and private organizations when purchasing electric patrol vehicles.



## PRODUCT FEATURES

Zero Motorcycles engineered the patrol lineup from the popular Zero S, Zero DS and Zero FX motorcycles. Beginning with already robust and proven platforms, Zero customizes each to meet the demands of law enforcement, security agencies, firefighting departments and more.

The Zero SP is designed for street use. The Zero DSP is a dual sport model designed for both on- and off-road use. The Zero FXP has increased off-road capability and builds upon the light and highly maneuverable Zero FX. All three models offer a wide array of options that are tailored to suit specific, unique needs.

2016 fleet motorcycles benefit from the same features found on the industry leading consumer models. At the core is the Z-Force® motor and power pack system. The brushless motor is sealed to ensure longevity and operates with such high efficiency that it requires no external cooling systems. Using state-of-the-art cell technology and advanced battery management systems, each motorcycle can travel farther, faster and last longer. With the optional Z-Force® Power Tank, the Zero SP is capable of traveling nearly 189 miles within the city, while the Zero FXP features a modular system that allows power packs to be swapped within seconds.

## SUMMARY OF WHAT'S NEW

The 2016 fleet lineup shares all the new features of the consumer motorcycles, including substantial upgrades to the revolutionary Z-Force® powertrain.

All 2016 police/authority models benefit from the new Z-Force® IPM (interior permanent magnet) motor, which is more efficient, cools more rapidly and has higher thermal capacity. Performance is improved, especially during hard riding, and sustained top speeds have increased.

Z-Force® power packs contain new optimized cell chemistry and boast the highest energy density in the electric vehicle industry. With greater capacity and improved efficiency, range is extended for all models, allowing officers to patrol farther and for longer durations.

The Zero SP and Zero DSP are compatible with the new Charge Tank accessory that nearly triples the on-board charging speed. Leveraging the popular J1772 standard, the Charge Tank is designed to work with Level 2 charging stations that are often located in highly trafficked areas or installed where the vehicles are stored. It will charge the new higher capacity ZF13.0 power pack to 95% in about three hours.

Zero improved ergonomics on the full line of patrol motorcycles for 2016. The Zero DSP and Zero FXP are equipped with a taller rise handlebar that provides a more assertive riding position and improved leverage, and all models now feature better brake modulation and increased comfort thanks to new rear brake pedal.

## AVAILABLE FEATURES

- » Whelen TIR3 forward-facing lights
- » Whelen TIR3 side-facing lights
- » Whelen TIR3 rear-facing lights
- » Programmable Whelen siren system with PA and Microphone
- » Rear rack, top box, side cases
- » Front battery/frame protection bars
- » 12 V accessory outlet
- » Hand guards
- » Heated seat
- » Windscreen
- » Scalable quick charger systems
- » Headlight/taillight cut switch and harness
- » Telescoping Pole Light



# FLEET PROGRAM

**ZERO FXP™**



**ZERO DSP™**





## ZERO SP™



## ZERO FXP

- » Off-road capable for parks, beaches, etc.
- » Lightweight, rapid acceleration, agile handling
- » Ideal for tight quarters such as arenas and congested areas
- » Modular power packs can be charged either on the motorcycle or elsewhere with optional accessories

## ZERO DSP

- » Extremely versatile dual sport model
- » Perfectly suited for both street and light off-road duty
- » High capacity integrated power pack
- » Over 100 miles combined city/highway range (with optional Power Tank)

## ZERO SP

- » Designed for city and suburban use
- » Quick acceleration, 95 mph top speed
- » Highly customizable to meet a wide variety of needs
- » 189 miles of city range, 82 on the highway at 70 mph



## MILITARY MOTORCYCLES PROGRAM OVERVIEW

In almost every way, an electric motorcycle is well-suited for military applications. They are quiet, have low heat profiles, emit no exhaust, are simple to operate and incredibly fast. With this in mind, Zero Motorcycles developed a program that is specifically designed to meet the needs of military applications. Working alongside military personnel, Zero Motorcycles is able to deliver a motorcycle that includes the options and accessories required for a successful deployment and mission.

Using Zero Motorcycles' industry leading Z-Force® powertrain, the Zero MMX features quick swappable power packs, direct drive gearing and an air-cooled motor. With no transmission, powertrain fluids or gas, the Zero MMX is also easy to transport and maintain.



## PRODUCT FEATURES

The Zero MMX is designed and built to meet the needs of a wide variety of military applications. It can be customized with a selection of accessories for specific types of use and various duty cycles.

With no exhaust and being exceptionally stealthy, the Zero MMX holds unique tactical advantages over traditional internal combustion alternatives. The 100% electric powertrain offers personnel the ability to rapidly move over technical terrain while making virtually no noise and emitting no smell. Perhaps the most covert form of two-wheeled transportation, the motorcycle is completely silent when stopped and can accelerate instantly from 0 rpm.

## SUMMARY OF WHAT'S NEW

New cell chemistry within the patented modular and removable Z-Force® power pack allows 14% more energy to be stored in the same amount of space and operate more efficiently, resulting in a system that boasts the highest energy density in the electric vehicle industry. This allows missions to be extended further and provides the rider with greater confidence.

The 2016 Zero MMX features improved ergonomics. A taller rise handlebar provides a more assertive riding position and improved leverage, and a new rear brake pedal yields better modulation and increased comfort.

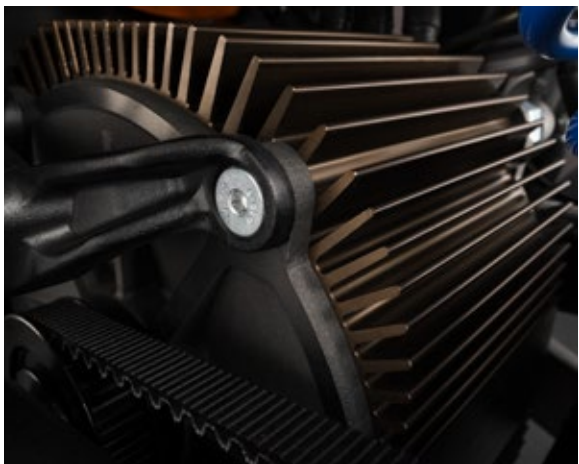
## STANDARD FEATURES

- » Keyed ignition
- » Modular and quick swappable power packs
- » Ability to operate in wet or rainy conditions with a one meter submersion capability
- » Chain-drive
- » Off-board charger
- » Off-road dash with indicators
- » Off-road tires
- » Kickstand

## AVAILABLE OPTIONS

- » Military switchgear kit: includes military switches (keyless ignition, headlight, safety override, reserve and infrared front and rear), headlight, fly screen, IR pigtailed
- » Aggressive foot pegs
- » Tie down eyelets with integrated tow cable and rear seat strap
- » On-board charger
- » Belt drive
- » Dual-sport tires
- » Hand guards
- » Passenger foot pegs
- » Road/street dash instrumentation

## Z-FORCE® MOTOR



The Z-Force® motor was developed from the ground up by Zero Motorcycles and optimized for efficiency, power and size. With nearly the same weight and volume as competitive brushless motors used in similar applications, the revolutionary motor produces up to 130% more power and 150% more torque. The Z-Force® motor on Zero's highest performance models features an interior permanent magnet (IPM) design that significantly improves performance during hard riding and allows higher sustained top speeds. Even more impressive, the compact brushless motor requires no liquid or forced-air cooling and requires no routine maintenance.

When combined with a Z-Force® power pack, the remarkably compact and light motor delivers amazing horsepower and breathtaking acceleration. Providing a unique ride quality, the motor produces 100% torque from a standstill for instantaneous throttle response and incredible off-the-line performance.

While sophisticated, the Z-Force® motor is designed to make the ownership experience simple and exhilarating. All extra parts, maintenance concerns and weight have been eliminated to help riders focus on the best part of owning a motorcycle—the ride.

- » Available in five different configurations for specific applications:  
75-5 and 75-5 IPM; 75-7 and 75-7 IPM; 75-7R IPM
- » Capable of as much as 67 hp and 106 ft-lb of torque
- » Impressive torque and a broad power band
- » Designed from the ground up by Zero Motorcycles to be the best electric motorcycle motor
- » Efficient, powerful, compact, brushless and sealed
- » Requires no routine maintenance
- » Passively air-cooled requiring no complex cooling systems

## Z-FORCE® POWER PACK AND POWER TANK



Z-Force® power pack technology has been revolutionizing the electric motorcycle industry since 2007 when the first Zeros started rolling out of the Santa Cruz factory. The goal: pack more energy into less space. Using state-of-the-art lithium-ion cell chemistry and advanced battery management systems, each motorcycle can travel farther, faster and last longer. A typical Zero S or Zero DS can travel over 200,000 miles with the power packs retaining 80% of their original maximum capacity.

In addition to longevity, Z-Force® power pack technology requires no active cooling or routine maintenance. The result is a completely electric motorcycle line that offers an exhilarating ride while saving on gas and virtually eliminating all routine powertrain maintenance.

### 100% MODULAR. SWAP IN. SWAP OUT.

Zero Motorcycles is the first electric motorcycle manufacturer to feature hot-swappable modules. The Zero FX and Zero FXS can be ridden using either one or two Z-Force® modules. A module can be added or removed in less than a minute. Charging can be done via the motorcycle's standard on-board charger or by using optional off-board charging accessories.



## ZERO MOTORCYCLES APP

Customizing performance takes on new meaning with the Zero Motorcycles App. Not only does the app allow riders to view a real-time customizable dashboard, it also allows riders to change the performance characteristics of their motorcycle. Using Bluetooth-enabled iPhone and Android mobile devices, riders can adjust acceleration, top speed and regenerative braking to their exact specifications.

The app provides two fundamental interfaces. The riding interface can be customized to show real-time data and acts as a secondary, more detailed motorcycle dashboard. When parked, it provides riding statistics, motorcycle data, helps with any diagnostics and allows the rider to customize both the motorcycle performance and the riding dashboard.

- » Bluetooth-enabled connectivity for both iPhone and Android mobile devices
- » Adjustable motorcycle performance to enable sportier or more economical riding
- » Customizable display reports precise state of charge and real-time power usage while riding



### Z-FORCE® POWER TANK

The Z-Force® Power Tank adds an additional 2.8 kWh of power pack storage capacity to any 2014 or later Zero S, Zero SR, Zero DS or Zero DSR model.\* An optional accessory, the Power Tank can be added at any time during or after the motorcycle is purchased. For example, an individual who purchases a 2016 Zero S ZF13.0 could upgrade their motorcycle to nearly 16 kWh of power pack capacity if additional range is needed. With that much energy storage capacity, a rider can expect to travel up to 197 miles in the city or 98 miles on the highway.

The Power Tank comes complete with a Z-Force® power pack module, necessary hardware and additional bodywork. It is recommended that customers take their motorcycle to an authorized Zero Motorcycles dealer for installation. Once installed, the new bodywork includes a completely new tank section of the motorcycle. The Power Tank occupies the area where the integrated tank bag would normally sit.

### FULLY RECYCLABLE

Zero Motorcycles uses the best practices in the EV industry to make sure all of our lithium-ion power packs are recycled. Each one uses a chemistry that allows us to take advantage of continuously improving battery-recycling programs.

\* Please note that the Power Tank is not compatible with motorcycles equipped with the Charge Tank.

## POWERTRAIN DIVISION



Zero Motorcycles offers the Z-Force® powertrain as an attractive option to companies and organizations looking to integrate industry leading technology into their products without having to invest years of time and money into developing a powertrain of their own. The components of the powertrain are available in several different packages designed to meet the needs of differing types of applications.

The revolutionary Z-Force® powertrain is high power, high efficiency and extremely compact. Designed by Zero Motorcycles in California, it is the product of years of research, development and testing. A modular design, the powertrain components can be used in a wide variety of applications where an electric power pack, motor or complete powertrain offer advantages. Using robust systems originally designed to endure demanding motorcycle applications, the Z-Force® powertrain offers a cost effective and rapid path to deploying top-of-the-line technology into a new concept, product or lineup.

Three main Z-Force® powertrain kits are available: battery pack, motor/controller and complete powertrain.

For more information about the technology used in the Z-Force® powertrain please see the “Technology” section of this press kit.

## ACCESSORIES



Zero Motorcycles offers a variety of accessories to enhance and personalize each motorcycle. Designed in collaboration with some of the industry's leading aftermarket suppliers, all accessories are engineered specifically for intended models.

### ACCESSORIES INCLUDE:

- » Charge Tank accessory nearly triples the charging speed of 2015 or later Zero SR, Zero S, Zero DS or Zero DSR through Level 2 charge stations
- » Power Tank accessory extends the range of any 2014 or later Zero SR, Zero S, Zero DS or Zero DSR with an additional 2.8 kWh of on-board power pack capacity
- » A line of Zero FX accessories, including top racks and drop bars
- » Scalable quick charger system that reduces motorcycle charging times by up to 75% (Note: For residential use, quick chargers typically need to be plugged into separate 110 V or 220 V circuits)
- » Top box and side case storage accessory options developed with GIVI
- » Commuter and dual sport windscreen options developed with MRA
- » Hand guards developed with Cyrca Racing





*"Thrilling to ride. Powerful. Silent."*

*Maxim*



# TEAM ZERO – STRUCTURED FOR GROWTH



**Richard Walker**  
CEO

Richard joins Zero Motorcycles from Control4 Corporation, a leading provider of personalized home automation and control solutions, where he served as Executive Vice President for Product Development and Product Operations. At Control4 he was responsible for overseeing product management, engineering, quality, customer training, customer support and supply chain operations. He comes to Zero with an extensive consumer products background having previously been General Manager of Hewlett Packard's \$6B consumer desktop PC business unit comprising the HP Pavilion, Compaq Presario and HP TouchSmart product lines. Under his leadership and direction, profits improved significantly and revenues grew 15%.

Richard brings a wealth of global business experience to Zero. He has lived and worked in Europe, North America and Asia. Having developed and executed growth plans for the emerging markets of China, India, Russia and Brazil while at HP, he not only understands the tremendous growth opportunities these countries represent, he also understands the unique challenges of each market. At Zero he takes on the leadership responsibility for establishing the company as the premier global provider of electric motorcycles to consumers and commercial customers.



**Abe Askenazi**  
CFO

Abe is a passionate engineer and motorcyclist who did his Master's Thesis on "The Dynamics of Motorcycles." Abe worked at Buell Motorcycle Co. for 15 years, where he rose to the position of Sr. Director of Analysis, Test and Engineering Process, reporting to Erik Buell and actively participating in Harley-Davidson Inc.'s Senior Leadership Group. He provided increasing levels of leadership to multi-functional teams in the delivery of 26 high performance motorcycle models across four different platforms, resulting in the production of over 130k vehicles yielding over \$1B in sales.

In 2010, Abe was recruited by Zero Motorcycles as VP of Engineering to head the development of a full line of industry-leading, on- and off-road electric Motorcycles. In 2011, Abe was promoted to the role of Chief Technology Officer and led his team in delivering the first mass-produced electric motorcycles capable of exceeding 100 miles on a single charge with batteries that last up to 300,000 miles and with powertrains that are completely maintenance-free.

Abe has numerous patents for motorcycle components and has published a textbook and multiple articles on analytical engineering.



**Curt Sacks**  
CFO

Curt comes to Zero Motorcycles having previously served as Chief Financial Officer for both GigOptix, Inc. and Endwave Corporation. He has over 20 years of progressive financial and management experience working both at public and private companies and with large established corporations and smaller-scale operations in their rapid growth phases. Curt's experience in leading the development and implementation of processes in dynamic environments is well-suited for Zero Motorcycles' tremendous global opportunities. He is focused upon building and leading a world class Finance and Administrative team.



**Pieter De Waal**  
VP of Global  
Sales, Marketing  
and Aftersales

Pieter brings more than 30 years of experience in the motorcycle and motorsports industries. He is a native South African and holds a B. SC. Engineering degree from the University of Stellenbosch.

He has spent most of his career in the automotive industry and joined BMW South Africa in 1994. Pieter ascended the ranks within BMW, holding a variety of roles in Europe including head of sales and marketing worldwide, before leading the motorcycle business in North America. Under his leadership, BMW Motorrad enjoyed dramatic growth in sales and customer satisfaction.

Pieter joined the Zero Motorcycles board of directors in 2013. In 2014, he directed Zero's operations in Europe and has since been appointed to head up global sales and marketing for the company.





**Scot Harden**  
**VP of Global**  
**Marketing**

Scot brings more than 40 years of racing, management, product development and brand building experience in the motorcycle industry to Zero. Inducted into the AMA Hall of Fame in 2008, Scot has amassed 20 different International motorcycle racing titles and more than 200 wins including two SCORE Baja 1000 wins, three SCORE Baja 500 wins and two SCORE Championship titles. Throughout his career, Harden has held executive sales, marketing and race team management positions with leading European motorcycle OEMs, including KTM and Husqvarna. His track record for building brands and companies is well-known throughout the industry.



**Umberto Uccelli**  
**Managing**  
**Director, Europe**

Umberto leads all of Zero Motorcycles' European operations. With a career spanning over 20 years with some of motorcycling's most iconic brands, he brings valuable expertise in sales, marketing and international expansion. Uccelli's motorcycle industry knowledge, passion for the sport and pioneering vision fuel Zero's continued growth in the vital European market. "I'm inspired by the opportunity to apply my experience with traditional motorcycles to help build the future of motorcycling," Umberto said. "Zero's technology is exciting, the bikes are thrilling to ride and the team is very strong."



**Kai Hypko**  
**VP of Operations**

Kai brings over 20 years of high tech and consumer electronics supply chain and operations management experience to Zero Motorcycles. An energetic and passionate leader, he has worked at Siemens, Plantronics and Finisar serving in various procurement, planning and operations roles. His international experience spans the globe and is fundamental in developing Zero's worldwide sourcing and operations footprint.

A nationally recognized expert on supply chain and operational excellence, Kai frequently speaks at forums and is often mentioned in industry publications. As a lifelong motorcycle and automobile devotee and recent battery propulsion convert, he is excited to share this enthusiasm with Zero Motorcycles.



**Dennis Gore**  
**VP of Product**  
**Development**

Dennis joins Zero Motorcycles as Vice President of Product Development. In this newly created role, he brings a hands-on approach to the integrated efforts of the engineering and R&D groups in creating the world's leading electric motorcycles. Dennis has a strong background in the automotive industry, having held strategic positions with Chery Automobile, Honda, Nissan and Mitsubishi. With his strong focus upon understanding customer expectations and market requirements, plus his passion for quality and innovation, Dennis and his team look forward to surprising and delighting Zero riders.





**ZERO MOTORCYCLES**

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United States

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