

KTM PRESENTS:

THE ZERO EMISSION SPORTMOTORCYCLE:

FREERIDE

FOR OFFROAD AND SUPERMOTO RIDERS!



KTM already showed the first prototype of a “zero emission” motorcycle in October 2008, which at that point was the result of the company’s cooperation with the Vienna Development Institute “Arsenal Research”. Now, 18 months later, the sports motorcycle manufacturer from Mattighofen in Austria is right on target for the release of the first series-ready KTM electric sports motorcycle. Under the title “Freeride” KTM will present two series-near prototypes at the 2010 Tokyo Motorcycle Show, which in one year’s time will transfer the sporting spirit of the brand that is always “Ready to Race” into a series model fit for the 21st century.

With its first zero emission motorcycle, the world’s leading producer of offroad motorcycles has developed an electrically driven sports motorcycle that proves that riding fun and environmental sustainability need not be in conflict with one another. The cornerstone of this development is the clear commitment to offroad motorcycle sports and the obvious intention to go on the offensive by further expanding the strongest part of the company’s business activities with a unique product that as yet does not exist in this format. At the same time this revolutionary development embodies completely new perspectives: Freeride also stands for the end of motorcycles fleeing the city and the accepted return of sporting motorcycle events in urban areas.

- 1.) A new chance for offroad sport
- 2.) A decisive step into the future
- 3.) Competitive price levels
- 4.) A long journey for the development process
- 5.) Completely new patented technology
- 6.) Focus on series ready machines
- 7.) Technical data sheet
- 8.) Questions and answers on KTM Freeride
- 9.) About the KTM Power Sports AG
- 10.) Press Contacts

FREERIDE

FOCUS ON » SERIES READY MACHINES

Following promising tests, the transition of the zero emission prototype from a purely research project to a series development project has long been a reality. Intensive work is being carried out on the preparation of the finished series product at KTM headquarters in Mattighofen, Austria. The two prototypes being shown at the Tokyo Motorcycle Show are already series-near and the bike will be available for sale 18 months later.

DI Harald Plöckinger, KTM Power Sports AG Board Member: “As a company that is both innovative and a market leader, KTM has set itself the task of developing new drive systems for our sports motorcycles. The concept of the zero emission motorcycle united well-known KTM core competencies with a new and very interesting motor technology. The first prototypes are already revealing the huge potential of this development project.”

VEHICLE CONCEPT

Frame	Lightweight Delta Box frame with forged aluminium components Self supporting tail in monocoque design
Suspension	Up-side-down fork and shock absorber with variable setting Progressive damping system
Tyres	21" Trial Enduro tires
Brake system	Hydraulic brake system with hand operation for the front and rear wheel Radial brake system with recuperation support through brake energy
Engine case	Combined drive casing in light metal design and all inclusive system integration
Drive motor	Permanent energized synchronous motor in shrunk-on-disc construction
Engine management	Modular high performance power module with integrated system and "Drive by Wire" security management
Transmission	Direct drive without clutch with gear transmission and chain
Traction battery	Plug in battery in li-ion (lithium-ion) technology

TECHNICAL DATA

Motor effective horsepower	7.4 kW (10 hp) / 6,000 Umin-1
Motor peak performance	22 kW (30 hp) / 6,000 Umin-1
Motor torque	43 Nm / 500 Umin-1
Maximum motor speed	6,600 Umin-1
Maximum battery voltage	300 V
Maximum energy content	2.5 kWh
Speed	70 Km/h
Overall multiplication factor (Primary / secondary level)	10.5 (2.4 / 4.5) (2.4 / 4.5)
Charging time	1.5 h
Total vehicle weight including removable traction battery	90 kg



FREEERIDE

QUESTIONS AND ANSWERS »

ON THE KTM „FREERIDE“

When will the first KTM electro motorcycle be available for sale?

KTM will begin with the transition of this project into the pre-series phase in the summer of 2010. A comprehensive test program will be carried out at the same time. According to current planning, the delivery of the first in the finished “Freeride” series will follow in late spring of 2011.

What will the KTM “Freeride” motorcycles cost?

The price has not yet been finalised however the aim is to stay under € 10,000 and with this to settle on a price comparable to a conventional, high quality sport Enduro for the first phase..

Will there be other variants or models?

The topic „electro-driven“ certainly offers more areas of application than classic offroad sport. In the first step it will only involve the Enduro because here KTM wants to gather experience and to push the sport. After that and because there are numerous possible applications, there is plenty of scope for variants.

Is the KTM Freeride homologized for on-street riding?

Yes. The machine will be homologised for use on the open road.

What does it look like for the range of the Freeride?

In principle it must be said that in the area of e-motors, reach is largely dependant on the profile of the user. The range is significantly less with a motocross professional at the handlebars than with a hobby Endurist. The development goal is to be equitable with the requirements in the area of Enduro. In other words, with mixed offroad deployment, approximately one hour of riding should be possible.

How long does it take to recharge the battery?

The battery can again be used at 100% performance after 90 minutes. It is possible to recharge the battery while still installed in the bike, but it can also be simply and quickly removed and replaced with another.

How many times is it possible to recharge the battery?

The final specification of the battery has not been specified. The ones that are presently being used are sufficient for approximately 500 recharges, which is also almost exactly the equivalent of the normal life cycle of an Enduro motorcycle. Generally it must be said that the development of batteries in this sector is still in the first stage and significant advances in development are expected in the coming years.

Does the “Freeride” mark the end of the classic Enduro with a combustion motor?

Absolutely not. From KTM’s point of view the new drive technology represents a big chance to open up a third stream of application in the area of motorcycles. Highly developed four-stroke motors will continue to be used in the future, just as will be the case with two-stroke motors. The latter are especially ideal for hobby riders and beginners because of their unbeatable costs/usage efficiency. Above all, motorcycles with an electro-motor will contribute to bringing the sport into the urban areas and at the same time speak to an entirely new target group.



FREERIDE