

FREERIDE E



19

2016

KTM

KTM!!!





;

»

»

, μ μ μ -

(*)

»

μ μ -

»

μ

»

μ

»

μ μ , μ

»

μ (20%-30% μ μ

μ , 80%-85% μ)

μ / μ μ !
€1-€2 100km μ

(*) μ





;



μ

μ

-

μ

μ

μ

μ

μ

()

μ

(

,

-

μ

)





» 2020 40%

, μ μ (, 2014)

» μ μ

μ μ

» μ 7,2 . 2020

» 13.000 μ

2020

(μ 40)





ΕΛΛΗΝΙΚΟ ΙΝΣΤΙΤΟΥΤΟ ΗΛΕΚΤΡΟΚΙΝΗΤΩΝ ΟΧΗΜΑΤΩΝ

ΕΛΙΝΗΟ

HELIEV

HELLENIC INSTITUTE OF ELECTRIC VEHICLES

. . . . -

μ

. . . . μ

1991

μ :



μ (AVERE)



μ μ

μ (WEVA).

,
Automobile)

μ

(FIA – Federation Internationale l'

μ

μ

,

μ

μ

.





Ανώτατο Εκπαιδευτικό Ίδρυμα Πειραιά
Τεχνολογικού Τομέα
Τ.Ε.Ι. ΠΕΙΡΑΙΑ

— μ μ

&

1 μ μ !



panels 3kW + μ





Ανώτατο Εκπαιδευτικό Ίδρυμα Πειραιά
Τεχνολογικού Τομέα
Τ.Ε.Ι. ΠΕΙΡΑΙΑ

— μ μ

&

—

1 μ μ !

» μ 100%

» μ μ

» 3-4 , 2

» 80-85%

» €15.000 - €20.000





Τ

μ

μ

()

μμ
Works".

μ μ

&

, μ
"e-Mobility





;

U.S. Sales of Large Luxury Vehicles

MODEL	2015 Sales	2014 Sales	% Change
Tesla Model S	25,202	16,689	51.01%
Audi A7	7,721	8,133	-5.07%
Audi A8	4,990	5,904	-15.48%
BMW 6-Series	8,146	8,647	-5.79%
BMW 7-Series	9,292	9,744	-4.64%
Jaguar XJ	3,611	4,329	-16.59%
Lexus LS	7,165	8,559	-16.29%
Mercedes-Benz CLS-Class	6,152	6,981	-11.88%
Mercedes-Benz S-Class	21,934	25,276	-13.22%
Porsche Panamera	4,985	5,740	-13.15%
Total	99,198	100,002	-0.80%

Source: Company reports





-

BMW i3
 Scion iQ EV
 Chevrolet Spark EV
 Honda Fit EV
 Fiat 500e
 Volkswagen e-Golf
 Mitsubishi i
 Nissan Leaf (30 kW-hr)
 Fiat 500e
 Smart electric drive
 Kia Soul EV
 Ford Focus Electric

Tesla Model S
 Tesla Model X
 Mercedes-Benz B-
 Class Electric Drive
 Toyota RAV4 EV
 BYD e6

KTM
 Harley – Davidson
 Polaris Brammo (Victory
 Empulse)
 Zero (S μ 320km)

Scooters

BMW
 Piaggio
 Honda





;

TESLA Gigafactory





;

TESLA Gigafactory

- Gigafactory ;
Nevada ;
- » 2020 μ 2013! Li-ion
- » μ μ μ
- » μ kWh 30%!
- » 35GWh ;
- » μ μ
- » μ 95
- » μ Panasonic



FREERIDE



KTM





» μ

» μ

» μ





μ	15hp (11 kW) @ 5500 rpm
	42 Nm @ 500 rpm
. μ	302.4 V
	70 km/h
	90 min (, 50min 90%)
(μ . μ μ μ Li-ion)	110 kg (E-SM, E-XC)







Li-ion
μ . BMS



12 V

HV

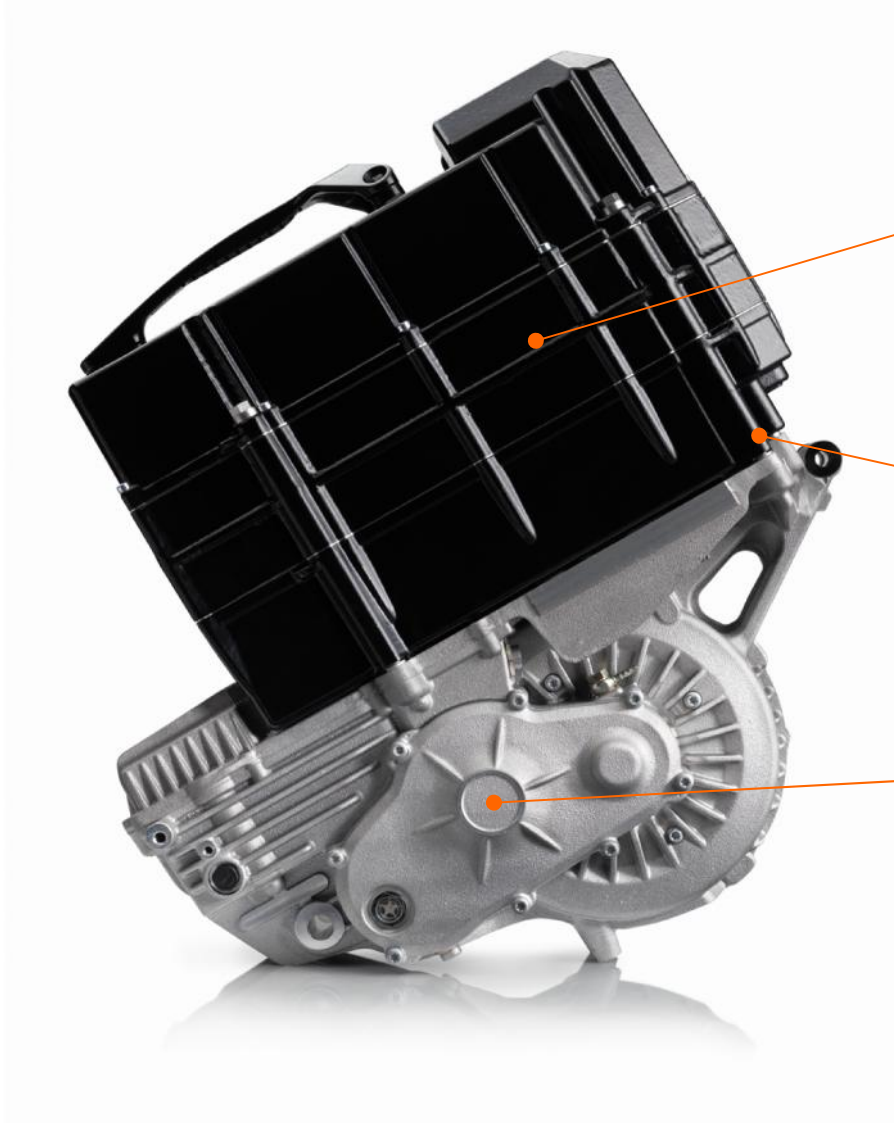


ECU
μ
μ , μ
μ , μ
μ DC/DC

(μ CAN)

μ





Li-ion (μ) μ μ

HV

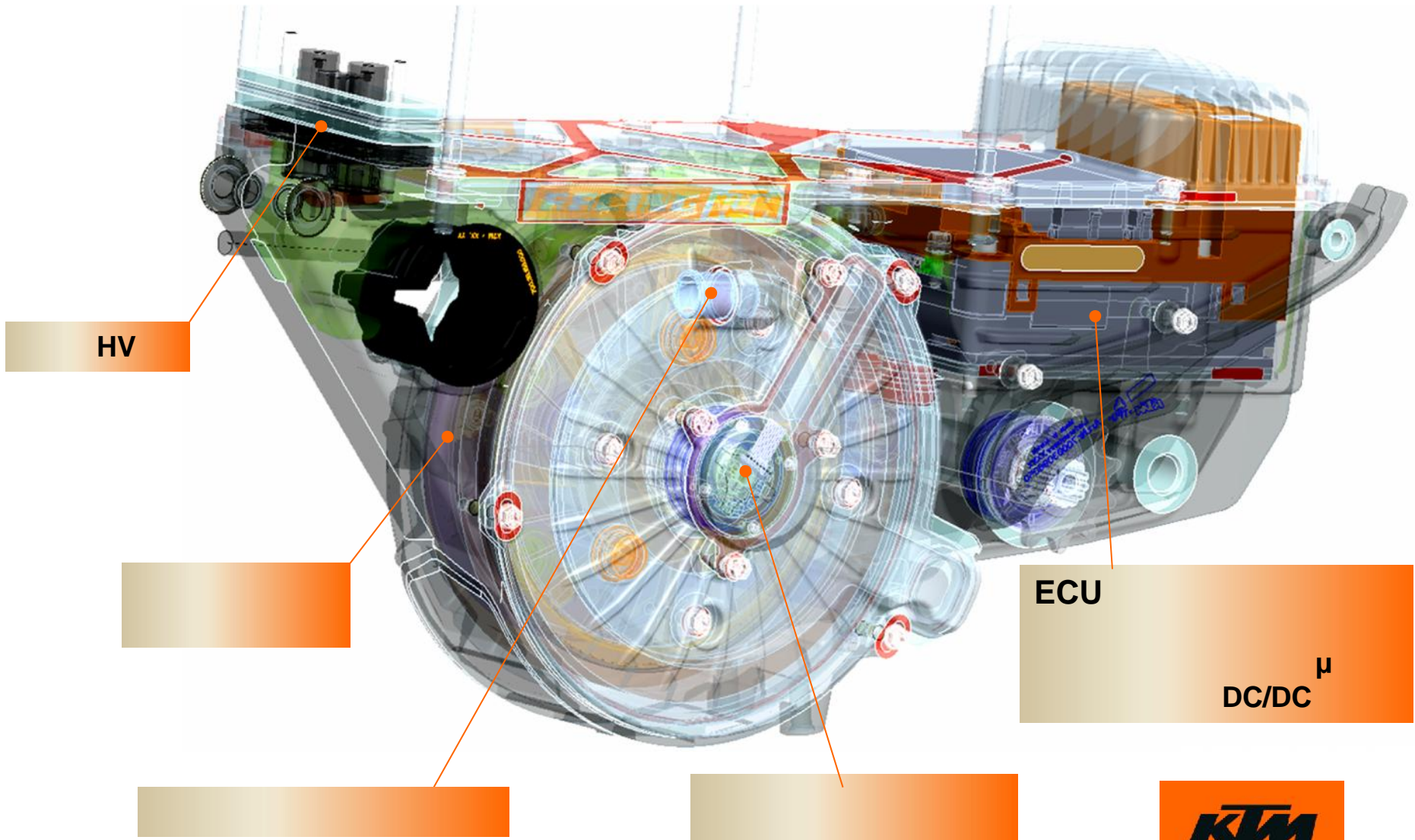
μ μ μ μ , ECU μ





:	201,6 – 302,4 V,	μ	259,2 V
μ	:	2,6 kWh	
μ	:	μ	100 A
μ	:	μ	10 A
:	360	Li-ion	
:	2,8 – 4,2V,	μ	3,6V







3 kW



μ

μ

μ



90min

μ

μ

μ



50 min

90 %



■ /

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FREERIDE E



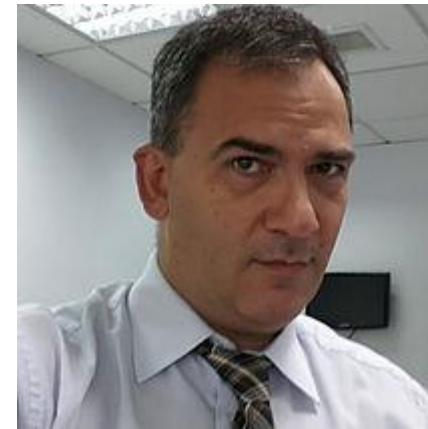
KTM



μ Metropolitan, μ

μ Metropolitan
μ μ μ
4 μ μ

(μ /
μ
2014
μ
)





■

μ

μ

Metropolitan,

μ



μ

1998.

μ

μ

μ

μ



(1996, 2000)



μ :

- Bristol Royal Infirmary
- Avon Orthopaedic Center
- Chicago Adventist Hospital
- Hospital for Special Surgery USA



μ

μ

μ



AAOS

μ

μ

μ

μ

μ



μ

Who is Who

μ

μ

μ





KTM Freeride E



Courtesy of KTM





READY
TO »»
RACE

