BMW Unveils All-Electric 3 Series: The 2027 i3

Description

The BMW i3, set to be the second electric vehicle (EV) built on a new platform, features advanced technology and impressive specifications. It has an 800 V battery pack that uses cylindrical cells, allowing for 20% more energy density compared to prismatic cells, which are found in earlier models like the i4. Its innovative design further increases energy density, enabling fast charging at 400 kW. BMW anticipates the i3 will offer a range of up to 440 miles (708 km), a significant 30% increase over previous generations.

At launch, the i3 will include the 50 xDrive variant. This version combines an asynchronous motor at the front with an electrically excited synchronous motor at the rear, producing a total of 463 hp (345 kW) and 476 lb-ft (645 Nm) of torque. Notably, energy losses are reduced by 40%, while the overall weight is 10% lighter, making production 20% cheaper. Sustainability is a key focus, as the vehicle contains around 30% recycled materials and utilizes renewable energy throughout its supply chain. As a result, the i3 can achieve carbon neutrality with a gasoline-powered vehicle within just a year.

Driving experience is also a priority for BMW. The i3 is designed to enhance handling with a near 50:50 weight distribution and a low centre of gravity. It uses rear-biased torque for better cornering and incorporates regenerative braking to reduce wear on brake systems. Overall, the i3 aims to provide improved driving dynamics while being eco-friendly.

Comprehension Questions

Multiple Choice

1. What type of battery pack does the BMW i3 use?
   - Option: 800 V
   - Option: 400 V
   - Option: 600 V
   - Option: 350 V

2. How much more energy density does the i3's cylindrical cells offer compared to prismatic cells?
   - Option: 10%
   - Option: 20%
   - Option: 30%
   - Option: 40%

3. What is the anticipated range of the BMW i3?

Option: 400 miles
Option: 440 miles
Option: 500 miles
Option: 550 miles

4. How much horsepower does the i3's 50 xDrive variant produce?

Option: 340 hp
Option: 400 hp
Option: 463 hp
Option: 500 hp

5. What percentage of recycled materials does the BMW i3 contain?

Option: 10%
Option: 20%
Option: 30%
Option: 40%

6. What kind of motors does the 50 xDrive variant of the i3 use?

Option: Only asynchronous
Option: Only synchronous
Option: A combination of asynchronous and synchronous
Option: None of the above

True-False

7. The BMW i3 has a 600 V battery pack.

8. Sustainability is a key focus in the production of the BMW i3.

9. The BMW i3 is designed to have a weight distribution of 60:40.

10. The 50 xDrive variant of the i3 includes an asynchronous motor in the front.

11. The i3 can achieve carbon neutrality with a gasoline-powered vehicle within two years.

12. The i3 is heavier than previous models due to its advanced technology.

Gap-Fill

13. The BMW i3 can fast charge at _____ kW.

14. The anticipated range of the i3 represents a _____% increase over previous generations.

15. The i3 will include the _____ xDrive variant at launch.

16. The total torque produced by the i3's motor is _____ lb-ft.

17. The i3 incorporates _____ braking to reduce wear on brake systems.

18. The overall weight of the i3 is _____% lighter compared to previous models.

Answer

Multiple Choice: 1. 800 V 2. 20% 3. 440 miles 4. 463 hp 5. 30% 6. A combination of asynchronous and synchronous
True-False: 7. False 8. True 9. False 10. True 11. False 12. False
Gap-Fill: 13. 400 14. 30 15. 50 16. 476 17. regenerative 18. 10

CATEGORY

1. Business - LEVEL4

Date Created
2026/03/19
Author
aimeeyoung99