
ZURICH, SWITZERLAND, OCTOBER 25, 2017

Nantes chooses breakthrough ABB e-bus technology

World's fastest flash-charging connection technology from ABB to power first fully electric 24-meter buses

ABB has won a \$20 million order from Swiss bus manufacturer HESS to supply its flash-charging technology for 20 e-buses and related infrastructure for the French city of Nantes. The buses will be operated by public transport operator, Société d'Economie Mixte des Transports de l'Agglomération Nantaise (Semitan).

Batteries mounted on the roofs of the Nantes buses will be charged in 20 seconds with a 600-kilowatt boost of power at selected stops while passengers are embarking and disembarking. It takes less than one second to connect the bus to the charging point, making it the world's fastest flash-charging connection technology. A further 1 to 5 minutes charge at the terminus at the end of the line enables a full recharge of the batteries.

ABB's flash-charging technology and onboard traction equipment, which make the flash-charging possible, are part of its innovative TOSA (Trolleybus Optimisation Système Alimentation) solution, which is the world's leading technology of its kind.

The fleet will run on the Busway Bus Rapid Transit (Line 4) route connecting the historic center of Nantes with municipalities on the southern side of the river Loire. The new bus system will increase passenger capacity by 35 percent enabling sustainable transport for about 2,500 commuters every hour. Since the route's inauguration in 2006, passenger numbers have increased, leading to overcrowded buses. The 24 meter long, fully electric buses from HESS will be the first of their kind in the world to be equipped with the flash-charging technology, enabling a higher passenger capacity, emission-free public transport and noise reduction. The buses are expected to be operational by the end of 2018.

"This revolutionary technology requires no overhead lines and provides silent, zero-emission mass transit as a viable alternative to fossil fuel powered buses, offering a model for future urban transportation," said Claudio Facchin, president of ABB's Power Grids division. "The project exemplifies our commitment to deliver customer value through technology and innovation, and reinforces our position as a partner of choice for enabling a stronger, smarter and greener grid, in line with our Next Level strategy."

Each of the new e-buses can carry 151 passengers and will be equipped with energy-efficient ABB drivetrain technology, comprising traction and auxiliary converters, permanent magnet traction motors, roof-mounted battery units and energy transfer systems.

ABB (ABBN: SIX Swiss Ex) is a pioneering technology leader in electrification products, robotics and motion, industrial automation and power grids, serving customers in utilities, industry and transport & infrastructure globally. Continuing more than a 125-year history of innovation, ABB today is writing the future of industrial digitalization and driving the Energy and Fourth Industrial Revolutions. ABB operates in more than 100 countries with about 136,000 employees. www.abb.com.

—

For more information, please contact:

Media Relations

Phone: +41 43 317 71 11

E-mail: media.relations@ch.abb.com

ABB Ltd

Affolternstrasse 44

8050 Zurich

Switzerland