

Irizar's i2e to the test with the Madrid EMT

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Following San Sebastian and Barcelona, Madrid is the third Spanish city to successfully test Irizar's new i2e electric model.

Irizar supplied one of its vehicles to Empresa Municipal de Transportes de Madrid (Madrid's Municipal Transportation Company) so three of its drivers from the Testing and Prototypes unit could put it to the test at the entity's Carabanchel operations centre, considered to be 15% to 20% harder than the average of EMT's lines.

*In order to **determine the range of the Irizar i2e electric bus**, the prototype was operated during a 12-hour period over two consecutive days until the batteries ran out. The test was carried out with a vehicle carrying 1,200 kilograms (30% of the total, according to calculations) and the auxiliary systems activated, except for the air conditioning equipment, in order to determine consumption more accurately. The circuit consisted of 880 metres with four stops at which the doors were opened and closed.*

*According to the conclusions of **Ángel Cedenilla**, Director of the operator's Mobile Material and Definition Division, "If the Irizar i2e operated a regular line, it could travel more than **180 kilometres without recharging**, which is approximately the equivalent of a 14-hour range." "With these conditions, this electric bus could be operated in 80 or 90 lines of Madrid's network."*

*The Irizar i2e is 12 metres long and can carry up to 76 passengers (24 of them seated). It is powered by a 230 kW motor that uses **sodium-nickel batteries and a set of super condensers**, giving it a range of 200-250 kilometres. The batteries, which are fully charged overnight during a five-hour period, are installed on the roof of the bus along with the super condensers, resulting in a weight of nearly three tons.*



In the next few months, more public transportation companies throughout Europe will be able to test its features and performance.