

TriHyBus

A Hydrogen Powered Public Transport Bus from ŠKODA

Information Kindly Provided by Czech Bus Portal www.busportal.cz www.svt.cz



A joint project coordinated by UJV Řež <http://www.nri.cz/eng>

Bus	SKODA	http://www.skoda.cz/en
Fuel Cell	PROTON	http://www.proton-motor.de
Refueller	LINDE	http://www.linde.com/hydrogen_flashsite_final/index.htm

Funding support is being provided through the

- Structural Funds of the European Union (http://ec.europa.eu/regional_policy/funds/prord/sf_en.htm) and
- Ministry of Transport of the Czech Republic <http://www.mdcr.cz/en/HomePage.htm>

The Hydrogen filling station will be located in the town of Neratovice which is in the Central Bohemian region of the Czech Republic. Hydrogen for the station will be produced off-site and delivered to the station by Linde Gas from the Linde site at Ostrava in Southern Moravia.

The filling station will have a pressure of 350 bar but can be changed to deliver 700 bar in the future. The on-site storage capacity can also be increased at a later date in order to service more vehicles.

The bus will be operated by Nerabus, part of the Veolia Transport Group <http://www.nerabus.cz>

Bus Technical Details

Body: Irisbus Citelis 12m

Fuel cell: 48 kW PEM

Secondary energy sources:

22 Traction storage battery Li-Ion (max. 100 kW, 26 kWh, 422V, LiFePO₄)

4 Ultracapacitors (17.8F, max 780V, max. 200 kW, usable energy 0,32 kWh)

Regenerative energy recovery

H₂ Storage Four (4) composite tanks

Volume 820 l

Pressure 35 MPa

Capacity ~ 20 kg H₂

Asynchronous traction electrical engine - 120 kW

Range 250 km

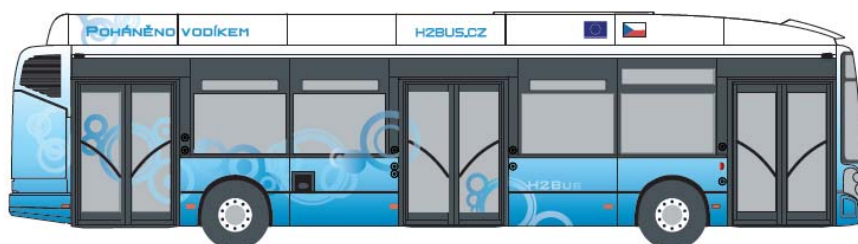
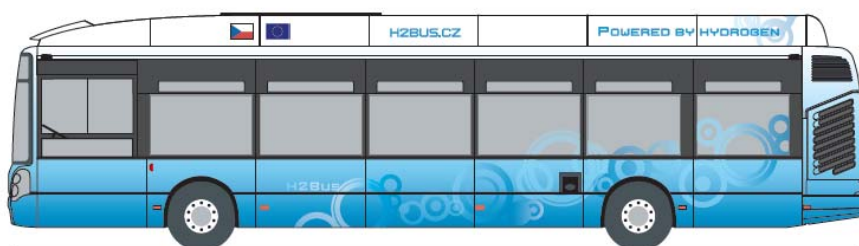
Service weight 14 t

Total weight 18 t

Max speed 65 km/h

H₂ Consumption 7.5 kg/100 km (equivalent to 20 l/100 km diesel)

The Bus will be demonstrated at exhibitions and will be equipped with a video system to inform passengers about the systems in bus.



m²
60

RAL 9010
CT 05340

FOTN IGNIS ET.

TPV	OU	Osobnost 2.2.2005	OHK	2.2.2005	mode	voz
		cenová skupina			Citelis	L 1
základ:	STANDARD		KAROSA		m	1:40
			5006033560		index	100/100
					XX	/