



1868 year — General Maltsev for needs of railway transport founded a plant in Radica village, Bryansk Uezd, Orlov province.

1890 year — The plant produced 2 steamers a year, 3 railway coaches of governmental type, coaches for narrow-gauge railway line, and also agricultural implements and different spare parts. 400 employees worked permanently at the plant at that time.

1926 year. The plant was awarded with new title «Governmental coach-building plant named after Uritskiy". Almost 3 thousand people worked at that time at the plant. The plant began to have mutual significance for railway economy of the country, providing it with mobile railway series of wagons.

1941 year. — The plant was evacuated to Engels city. Main type of products of the plant during the war time of 1941-1943 years was production of artillery packets.

28 february 1950 year. — By the resolution of Council of Ministers of the USSR from 28 february 1950 year it was decided to reequip the plant named after Uritskiy to the first trolleybus plant in the country.





# The Enterprise from 19 th century and till this day produces actual, innovative and governmentally important products.



1955 year. - MTB-82 360 units. Their production continued up to 1961 year.

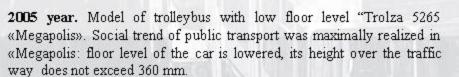
1961 year. ZiU-5 of own construction. By 1968 year their production was 1.500 trolleybuses.

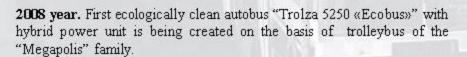




1972 year. - 1972 year. ZiU-682, which for a long time was a base model for a whole range of different modifications. From 1972 until 2013 year around 70 thousands trolleybuses were produced.

2003 year. - 2003 year. New trolleybus with lowered floor level - "Trolza 5275.05 «Optima».





2011 year. Autobus "Trolza 52501 «Electrobus»" is being created on the basis of the trolleybus of the "Megapolis" family.









- \*Semi-low-floor (TrCS).
- •Period of exploitation is up to 15 years.
- Combination of pricequality



- \*Low-floor ( floor level is 360 mm. ).
- \*Avant-garde design
- \*Harmonic combination of composite materials
- •Panoramic glazing



- ·Low-floor
- •Euro 5 and higher
- \*Works on compressed natural gas
- \*Reserve of autonomous course up to 250 km.
- \*Ovals of the roof, lining boards, mask of the front and rear part are made of composite materials



- \*Low-floor
- \*Reserve of autonomous course up to 100 km.
- \*Works on lithiumion batteries
- \*Time of full charge is 3,5 hours
- \*Low noise level



- \*Low-floor (floor level is 340 mm.)
- \*Electroportal axle with motor-wheel system
- \*Doors of lean-to type
- \*Renewed design of the passenger compartment and cabin of the driver

TROLZA-5275.03 «Optima» TROLZA-5265 «Megapolis»

TROLZA-5250 «Ecobus» TROLZA-52501 «Electrobus» TROLZA-5265 «Megapolis 2»



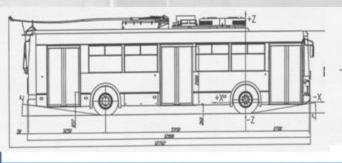


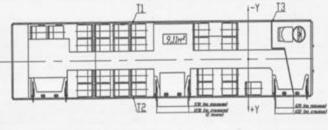


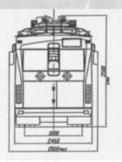


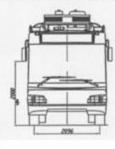
- •Semi-low-floor in the front and in the middle part trolleybus.
- •System of control is TrCS.
- •Period of exploitation is up to 15 years.
- •Asynchronous engine.
- •Combination of price-quality



















- \*Modern low-floor trolleybus (height of he floor is 360 mm.).
- \*Capacity to carry up to 100 people.
- \*Harmonic combination of composite materials
- \*Executed in two variants: 12 and 18 meters.
- ·Ovals of the roof, lining boards, mask of the front and rear part are made of composite materials
- Guaranteed period of body service is more than 20 years.
- \*Possibility of autonomous course increase up to 40 km.





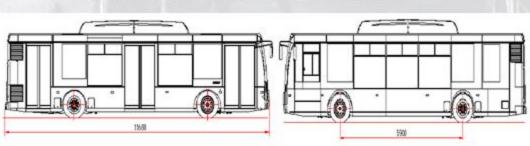
### Trolza-5250 ECObus

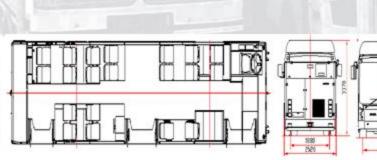






- ☐ Modern low-floor city bus (height of the floor is 360 mm.).
- □Autobus with hybrid traction drive in compliance with Euro 5 and higher.
- □Passenger capacity is 98 people, including places for sitting 21.
- ☐As fuel compressed natural gas is used. Certificate of safety and vehicle type approval is available.
- Microturbogenerator by the firm Capstone with the capacity of 65 KW is used as power generating unit.
- Resource of gas turbine equipment is 5 years.
- ☐Guaranteed period of body service is more than 20 years.











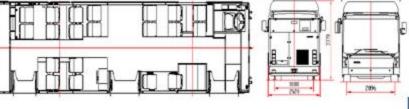




- Electrical autobus (height of the floor is 360 mm.).
- \*Used high-tech rechargeable battery packs produced by the firm «Liotech» provide work of Electrobus during a shift without recharge.
- \*Thanks to usage of modern asynchronous traction drive it was possible to lower down consumption of electric power by 35-40% compared to the ordinary trolleybuses.
- •Multiplex system of control and diagnosis is used on this autobus. System provides maximum comfort as well as for the driver as for the operating personnel.







## Option sets for produced trolleybuses CJSC "Trolza"



#### Necessary option sets

- ➤ Autonomous course (up to 5-20 km.) + unification of placement and mounting of autonomous run batteries (5, 10, 15, 20 km.)
- > CAN bus in low voltage and high voltage circuits
- > Heat curtain in passenger compartment or system of microclimate control
- > Automatic gangway for disabled people
- > Double glazing
- > Motor-wheel
- > Independent suspension
- > Improved dashboard

#### Tuning option sets

- Cruise control
- ➤ Wi-Fi
- > Application of side glasses of "chameleon" type
- Illuminated borders of steps by light emitting diodes
- > Glued-in pane to the toned glass
- > Hatch control remote system
- Folding seats with a spring mechanism
- > Toned sunroof hatch

#### Planned option sets

- > Electric power steering
- > Doors of lean-to type
- > Squat or kneeling at the trolleybus stops trolleybus
- > Ladder for access to the roof of movable type
- > Usage of solar powered batteries for own needs
- > Interactive system for external advertising (plasma display panel and so on )

