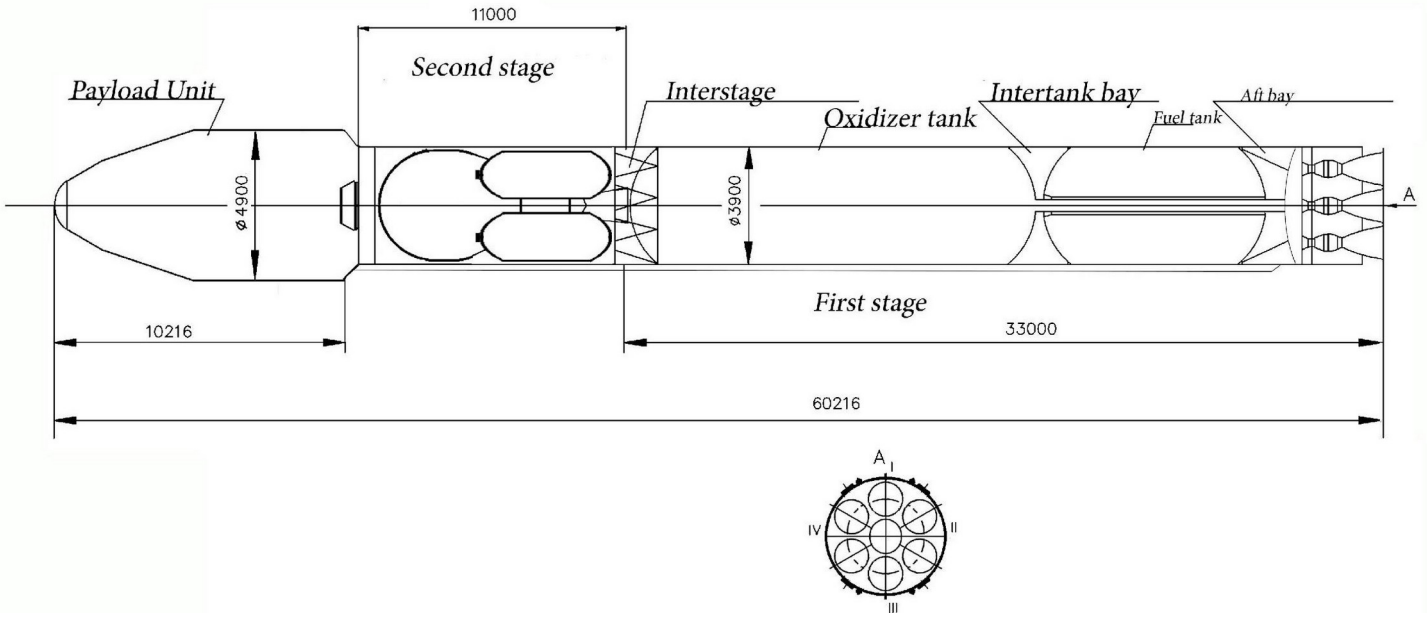
# ZENIT-AUSTRALIA SPECIFICATIONS




*ZENIT-AUSTRALIA ILV layout diagram (not to scale, all dimensions in mm).*

Launch Vehicle Specifications:

- Uses liquid oxygen - kerosene fuel for all stages;
- Useful length of the payload compartment is not less than 7530mm;
- Employs automatic flight termination and radio flight termination using 2 UHF receivers at 400-450 MHz on the orbital trajectory until the launch vehicle leaves the Earth's atmosphere.

Payload Compartment Parameters and Operating Environment:

- Inner diameter of the fairing is not less than 4600mm;
- Useful length of the payload compartment is not less than 7530 mm;
- On launch, longitudinal G-forces do not exceed 6G at any time during flight;
- Lateral acceleration of the payload does not exceed 2.35G;
- Acoustic load on the payload is under 135.2 dB;
- Vibration acceleration of the payload does not exceed 40m/s$^2$;
- Payload shock loads are under 1200G;
- Temperature inside the fairing does not exceed 93$^0$C.

The components and sub-systems of the 1st and 2nd stages (including propulsion) are modified components of the Zenit, and of the 1st stage the USA Antares launch vehicles. The guidance and control system (GCS) for Zenit-Australia has been developed and a sample set has been

manufactured. All components of Zenit-Australia are manufactured in Ukraine, USA, EU, and Australia.

Future Satellite Platform

Satellite platform will be developed by Yuzhmash for launches using Zenit-Australia at a later stages of the project for launches using Zenit-Australia. It will be available in two versions: one using liquid propellants, another using electromagnetic propulsion.

Electromagnetic propulsion engines that will be used by the satellite platform developed in Ukraine are now manufactured for export. Platform’s operational parameters are in line with other electromagnetic platforms available on the market.