NEWSPACE MARKET

NEWSPACE MARKET · COMPANY PROFILE

Yuzhnoye Design Bureau

Ukraine · founded 1954 · yuzhnoye.com

53
PRODUCTS

newspacemarket.com/companies/yuzhnoye/

as of 20 August 2026

ABOUT

Yuzhnoye Design Bureau

Yuzhnoye State Design Office (KB Pivdenne) is Ukraine's premier rocket and space engineering organization, providing full-cycle development of launch vehicles, spacecraft, and propulsion systems. Founded in 1954 and headquartered in Dnipro, it has developed over 400 space and defense systems, including the Zenit and Cyclone launch vehicle families, the Antares first stage, liquid and solid propellant rocket engines, Earth observation satellites, and nano-spacecraft. A 100% state-owned joint-stock company, Yuzhnoye offers comprehensive services spanning aerodynamic design, ballistics, thermal analysis, experimental testing, and advanced manufacturing including 3D printing and explosive welding.

PRODUCTS

Product catalogue

YUZHNOYE DESIGN BUREAU

Ablation Jet Engine

The Ablation Jet Engine developed by Yuzhnoye SDO is a pulsed plasma thruster-type propulsion system intended for changing and maintaining nanosatellite relative orbital position d

Working Medium	Fluoroplastic (PTFE)
Thrust	0.1 mN
Specific Impulse	20,000 m/s
Total Impulse	200 N*s
Maximum Power	20 W
Engine Dimensions	90 x 21 x 32 mm
Control Unit Dimensions	100 x 100 x 30 mm

price on request

YUZHNOYE DESIGN BUREAU

Ammonia Jet Propulsion System (APS)

The Ammonia Jet Propulsion System (APS) developed by Yuzhnoye SDO is designed for correction of spacecraft injection errors in orbital period and maintenance of orbital period thro

Propellant	Ammonia
Number of Engines	2
Engine Thrust	0.049 N
Total Thrust Impulse (hot mode)	7,000 N*s
Total Thrust Impulse (cold mode)	2,500 N*s
Number of Firings	Up to 500
Maximum Firing Duration	15 minutes

price on request

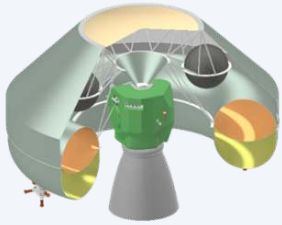
YUZHNOYE DESIGN BUREAU

Antares

The Antares is a medium-lift class two-stage launch vehicle developed through collaboration between Orbital Sciences Corporation (now Northrop Grumman) and Ukraine's Yuzhnoye

Vehicle Class	Medium-lift
Number of Stages	2
Height	42,500 mm
Body Diameter	3,900 mm
Gross Mass (without payload)	330 t
Payload to 200 km x 300 km, 51.6 deg	8.1 t
Stage 1 Engines	2 x RD-181

price on request



YUZHNOYE DESIGN BUREAU

Circumlunar Booster Tug (LBT)

The Circumlunar Booster Tug (LBT) is an in-space propulsion stage developed by Yuzhnoye SDO for capturing payloads arriving on translunar trajectories into stable lunar orbit. Powe

Liftoff Mass	30.5 t
Engine	RD861K
Propellants	NT + UDMH
Payload Mass Delivered to Lunar Orbit	21.3 t

price on request

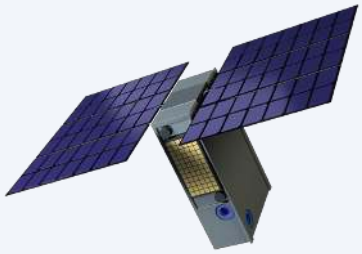
YUZHNOYE DESIGN BUREAU

CubeSat 12U Lunar

The CubeSat 12U Lunar is a deep-space small satellite developed by Yuzhnoye SDO designed to accomplish a solo flight to circumlunar orbit from geostationary transfer orbit (GTO), a

Mass	20 kg or less
Payload Volume	Up to 4U
Average Power	80 to 200 W
Peak Power	Up to 230 W
Propellant	Iodine
Propulsion Thrust (per engine)	1.24 x 10^-3 N
Total Impulse (per engine)	3.7 x 10^4 N*s

price on request



YUZHNOYE DESIGN BUREAU

CubeSat 6U Lunar

The CubeSat 6U Lunar is a small deep-space spacecraft developed by Yuzhnoye SDO designed to be injected into circumlunar orbit as a piggyback payload on a scheduled lunar mission.

Mass	14 kg or less
Payload Volume	Up to 2U
Average Power	60 to 65 W
Peak Power	Up to 130 W
Angular Attitude Accuracy	0.5 deg
Angular Stabilization Accuracy	0.005 deg/s
Target Orbit	Circumlunar

price on request

YUZHNOYE DESIGN BUREAU

Cyclone-1

The Cyclone-1 is a lightweight three-stage liquid-propellant launch vehicle developed by Yuzhnoye SDO for deploying payloads into low Earth orbits, including sun-synchronous orbits

Vehicle Class	Lightweight
Number of Stages	3
Height	30,000 mm
Body Diameter	2,250 mm
Fairing Diameter	2,250 mm
Gross Mass	65 t
Stage 1 Engine	RD870

price on request

YUZHNOYE DESIGN BUREAU

Cyclone-4M

The Cyclone-4M is a two-stage medium-lift class launch vehicle developed by Yuzhnoye SDO for deploying spacecraft into low, medium, and high near-Earth orbits, including sun-synchr

Vehicle Class	Medium-lift
Number of Stages	2
Height	39,000 mm
Body Diameter	3,900 mm
Fairing Diameter	4,000 mm
Launch Mass (without payload)	260 t
Stage 1 Engines	4 x RD870

price on request

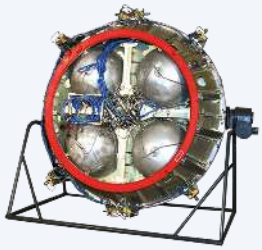
YUZHNOYE DESIGN BUREAU

Cyclone-5

The Cyclone-5 is a three-stage medium-lift class monoblock launch vehicle developed by Yuzhnoye SDO for placing spacecraft into low, medium, and high Earth orbits including geostat

Vehicle Class	Medium-lift
Number of Stages	3
Height	51,000 mm
Body Diameter	3,900 mm
Fairing Diameter	4,000 mm
Gross Mass (without payload)	332 t
Stage 1 Engines	4 x RD870

price on request



YUZHNOYE DESIGN BUREAU

DU802

The DU802 is a pneumatic pump-feed liquid-propellant propulsion system developed by Yuzhnoye SDO for autonomous space tug applications requiring extended operational lifetime. It i

Propellants	NT + UDMH
Vacuum Thrust	0.45 tf
Specific Impulse (vacuum)	322.5 s
Propellant Mixture Ratio	2.25
Number of Starts	10
Total Mass	165.4 kg
Feed System	Pneumatic pump

TRL 7 price on request

YUZHNOYE DESIGN BUREAU

Flying Lunar Lander

The Flying Lunar Lander is an advanced lunar surface mobility vehicle developed by Yuzhnoye SDO that can conduct research at up to three separate sites on the lunar surface, with s

Payload Capacity (per site visit)	50 kg
Single-Site Maximum Payload	150 kg
Number of Surface Sites	Up to 3
Maximum Distance Between Sites	~20 km
Propulsion Engine	RD840
Propellants	NT + UDMH

price on request

YUZHNOYE DESIGN BUREAU

Gas-Jet Propulsion System (GJPS)

The Gas-Jet Propulsion System (GJPS) developed by Yuzhnoye SDO damps spacecraft initial post-separation disturbances and provides attitude control, orbit correction, and spacecraft

Working Medium	Air, nitrogen, or argon
Maximum Bottle Pressure (at 20 deg C)	23 MPa
Nominal Gas Pressure	0.3 MPa
Total Thrust Impulse	250 to 7,000 N*s
Engine Thrust Options	0.1; 0.2; 8.5 to 55 N
Thrust Excursion	+/-25%
Specific Impulse	710 m/s

price on request

YUZHNOYE DESIGN BUREAU

Geostationary Telecommunication Satellite

The Geostationary Telecommunication Satellite developed by Yuzhnoye SDO provides comprehensive communications services from geostationary orbit at 35,786 km altitude, including fix

Satellite Mass (lift-off)	4,920 kg
Payload Mass	350 kg
Orbital Type	Geostationary
Orbital Altitude	35,786 km
Orbital Inclination	0 deg
Revolution Period	1,436.07 min
Position-keeping Accuracy	+/-0.1 deg latitude/longitude

price on request

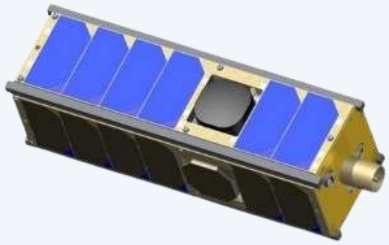
YUZHNOYE DESIGN BUREAU

Green Monopropellant Propulsion System

The Green Monopropellant Propulsion System developed by Yuzhnoye SDO is intended for generating thrust impulse bits to extend spacecraft lifetime, particularly for CubeSat-class na

Working Medium	HAN-based monopropellant
Pressurant	Isobutane
Total Thrust Impulse	0.32 kN*s
Thrust	0.153 N
Monopropellant Mass	0.15 kg
Power Consumption	up to 13 W*h
Active Period	at least 1.0 year

price on request



YUZHNOYE DESIGN BUREAU

GS-1 Nanosatellite

The GS-1 is a CubeSat-class nanosatellite developed by Yuzhnoye SDO, designed primarily to verify in the space environment the adopted fundamental engineering solutions to a novel

Dimensions	111 x 110 x 370 mm
Bus Mass	2,987 g
Propulsion Unit Mass	1,000 g
Orbit Type	Near-circular
Orbital Altitude	350 to 800 km
Orbital Inclination	48 to 98 deg
Propulsion Type	Green monopropellant

price on request

YUZHNOYE DESIGN BUREAU

Hall-Engine Electric Jet Propulsion System (EJPS)

The Hall-Engine-Based Electric Jet Propulsion System (EJPS) developed by Yuzhnoye SDO is designed for spacecraft orbit correction, attitude stabilization, and interplanetary flight

Working Medium	Xenon
Maximum Bottle Pressure (at 50 deg C)	13 MPa
Total Thrust Impulse	50 to 1,000 kN*s
Hall Engine Thrust	1 to 66 mN
Thrust Excursion	15%
Specific Impulse	2,200 to 22,000 m/s
Thrust-to-Power Ratio	16 to 20 W/mN

price on request

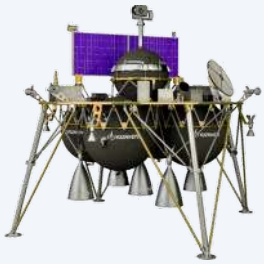
YUZHNOYE DESIGN BUREAU

Heavy Lunar Lander

The Heavy Lunar Lander is a large-payload lunar surface delivery vehicle developed by Yuzhnoye SDO, designed to deliver up to 10 tonnes of useful payload to the lunar surface. This

Payload Capacity to Lunar Surface	Up to 10 tonnes
Primary Applications	Lunar base modules, manned vehicles

price on request



YUZHNOYE DESIGN BUREAU

Light-Class Lunar Lander

The Light-Class Lunar Lander is a conceptual lunar surface delivery vehicle developed by Yuzhnoye SDO, capable of delivering a 50 kg scientific or technology payload to the lunar s

Payload Capacity to Lunar Surface	50 kg
Propulsion Engine	RD840
Propellants	NT + UDMH
Surface Operational Duration	14+ days

price on request

YUZHNOYE DESIGN BUREAU

Liquid-Propellant Low-Thrust Thrusters

Yuzhnoye SDO develops and manufactures a family of liquid-propellant low-thrust thrusters incorporated into spacecraft attitude control and orbit correction propulsion systems. The

Thrust Range	30 to 100 N
Propellants	Nitrogen Tetroxide + UDMH
Cyclone-4 Specific Impulse	2,000 m/s
Cyclone-3 Specific Impulse	2,600 m/s
Cyclone-4 Guaranteed Ignitions	30,000
Okean-O Guaranteed Ignitions	50,000
Cyclone-4 Total Run Time	5,600 s

price on request

YUZHNOYE DESIGN BUREAU

Lunar Booster Stage (LBS)

The Lunar Booster Stage (LBS) is a cryogenic upper stage developed by Yuzhnoye SDO for injecting payloads from low Earth orbit onto translunar trajectories in support of crewed and

Liftoff Mass	92.6 t
Engines	2 x RD809K
Propellants	LOX + kerosene
Payload to Translunar Trajectory	30.5 t

price on request

YUZHNOYE DESIGN BUREAU

Lunar Solar Power Plant

The Lunar Solar Power Plant (SPP) is a surface power generation system developed by Yuzhnoye SDO designed to provide sustained electrical power to an industrial-research lunar base

Power Output (lunar day, typical mode)	10 kW
Power Output (lunar night, sleep mode)	1 to 2 kW
Solar Panel Area	100 m2
Total System Mass	4,110 kg
Energy Storage	Lithium-ion batteries + electrochemical generators

price on request

YUZHNOYE DESIGN BUREAU

Mayak-M-3.9

The Mayak-M-3.9 is a two-stage heavy-lift class launch vehicle developed by Yuzhnoye SDO, utilizing RD815 engines on the first stage and technologies derived from the proven Zenit,

Vehicle Class	Heavy-lift
Number of Stages	2
Height	65,000 mm
Body Diameter	3,900 mm
Fairing Diameter	4,200 mm
Gross Mass (no payload)	526 t
Stage 1 Propellant	LOX + kerosene

price on request

YUZHNOYE DESIGN BUREAU

Mayak-SH-3

The Mayak-SH-3 is a super heavy-lift class two-stage launch vehicle developed by Yuzhnoye SDO, capable of placing 59.3 tonnes into low Earth orbit and 18.7 tonnes on a lunar trajec

Vehicle Class	Super heavy-lift
Number of Stages	2
Height	75,000 mm
Body Diameter	3,900 mm
Fairing Diameter	5,100 mm
Gross Mass (no payload)	1,387 t
Stage 1 Propellant	LOX + kerosene

price on request

YUZHNOYE DESIGN BUREAU

Mayak-SH-5

The Mayak-SH-5 is a super heavy-lift class two-stage launch vehicle developed by Yuzhnoye SDO, capable of placing 93.2 tonnes into low Earth orbit and 30.5 tonnes on a lunar trajec

Vehicle Class	Super heavy-lift
Number of Stages	2
Height	80,000 mm
Body Diameter	3,900 mm
Fairing Diameter	6,200 mm
Gross Mass (no payload)	2,246 t
Stage 1 Propellant	LOX + kerosene

price on request

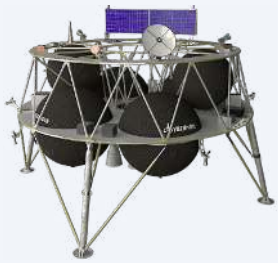
YUZHNOYE DESIGN BUREAU

Mayak-SH-7

The Mayak-SH-7 is the largest variant in Yuzhnoye SDO's Mayak super heavy-lift launch vehicle family, capable of delivering 133 tonnes to low Earth orbit and 40 tonnes on a l

Vehicle Class	Super heavy-lift
Number of Stages	2
Height	79,900 mm
Body Diameter	3,900 mm
Fairing Diameter	6,200 mm
Gross Mass (no payload)	3,001 t
Stage 1 Propellant	LOX + kerosene

price on request



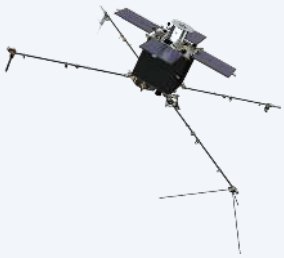
YUZHNOYE DESIGN BUREAU

Medium-Class Lunar Lander

The Medium-Class Lunar Lander is a larger lunar surface delivery vehicle developed by Yuzhnoye SDO designed for delivering medium-mass payloads to the lunar surface, powered by the

Propulsion Engine	RD860M
Propellants	NT + UDMH
Variants Available	Expendable or reusable
Surface Operational Duration	14+ days

price on request



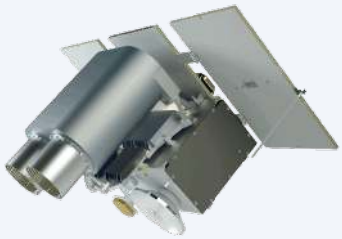
YUZHNOYE DESIGN BUREAU

MicroSat-M

The MicroSat-M is a scientific microsatellite developed by Yuzhnoye SDO for observing dynamic processes in Earth's ionosphere and conducting technological experiments in the

Total Mass	195 kg
Payload Mass	75 kg
Orbit Type	Circular sun-synchronous
Orbital Altitude	~668 km
Orbital Inclination	~98.1 deg
Attitude Control	3-axis active with 3-axis magnetometer
Orientation Accuracy	5 deg or less

price on request



YUZHNOYE DESIGN BUREAU

MS-VR

The MS-VR is a compact optical Earth observation microsatellite developed by Yuzhnoye SDO that will obtain on-the-spot high-resolution digital panchromatic and multispectral visibl

Total Mass	~50 kg
Payload Mass	~15 kg
Orbit Type	Sun-synchronous
Orbital Altitude	~500 km
Off-Track Re-aiming Capability	+/-350 km
Data Link Rate	320 Mbps
Orbit Correction	Available

price on request

YUZHNOYE DESIGN BUREAU

RD805

The RD805 is a single-chamber staged combustion cryogenic rocket engine developed by Yuzhnoye SDO, utilizing an oxidizer-rich preburner cycle and incorporating tried-and-tested com

Propellants	O2 + kerosene
Vacuum Thrust	2.15 tf
Specific Impulse (vacuum)	345 s
Propellant Mixture Ratio	2.5
Number of Starts	1
Engine Weight (excl. gimbal drives)	80 kg
Cycle	Staged combustion (oxidizer-rich preburner)

TRL 4 price on request

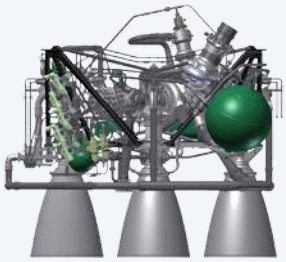
YUZHNOYE DESIGN BUREAU

RD809K

The RD809K is a restartable single-chamber staged combustion cryogenic rocket engine developed by Yuzhnoye SDO for upper stage pitch and yaw control applications. Derived from prov

Propellants	O2 + kerosene
Vacuum Thrust	10 tf
Specific Impulse (vacuum)	352 s
Propellant Mixture Ratio	2.62
Number of Starts	Up to 4
Engine Weight (excl. gimbal drives)	330 kg
Cycle	Staged combustion

TRL 6 price on request



YUZHNOYE DESIGN BUREAU

RD809M

The RD809M is a four-chamber staged combustion cryogenic rocket engine developed by Yuzhnoye SDO for upper stage main propulsion, enabling pitch, yaw, and roll control through indi

Propellants	O2 + kerosene
Vacuum Thrust	9 tf
Specific Impulse (vacuum)	345 s
Propellant Mixture Ratio	2.5
Number of Chambers	4
Number of Starts	1
Engine Weight (excl. gimbal drives)	325 kg

TRL 6 price on request

YUZHNOYE DESIGN BUREAU

RD815

The RD815 is a single-chamber dual-thrust staged combustion cryogenic rocket engine developed by Yuzhnoye SDO as the core propulsion element for the advanced Mayak family of heavy

Propellants	O2 + kerosene
Sea Level Thrust	251.3 tf
Vacuum Thrust	274.5 tf
Specific Impulse (sea level)	306.7 s
Specific Impulse (vacuum)	335 s
Propellant Mixture Ratio	2.7
Number of Starts	1

TRL 4 price on request

YUZHNOYE DESIGN BUREAU

RD835 / RD835T

The RD835 and RD835T are dual-thrust staged combustion cryogenic rocket engines developed by Yuzhnoye SDO with a high thrust-to-weight ratio, designed for advanced Mayak family lau

Propellants	O2 + kerosene
Vacuum Thrust	50 tf
Specific Impulse (vacuum)	355 s
Propellant Mixture Ratio	2.6
Number of Starts (RD835)	2
Number of Starts (RD835T)	1
Engine Weight RD835 (excl. gimbal drives)	830 kg

TRL 3 price on request

YUZHNOYE DESIGN BUREAU

RD840

The RD840 is a liquid-propellant low-thrust engine developed by Yuzhnoye SDO, intended for use in space launch vehicle apogee stages and spacecraft orbital maneuvering systems. It

Propellants	NT + UDMH
Vacuum Thrust	40.7 kgf
Specific Impulse (vacuum)	315 s
Propellant Mixture Ratio	2.05
Chamber Pressure	10 kgf/cm2
Number of Ignitions	100
Total Operation Time	2,750 s

price on request

YUZHNOYE DESIGN BUREAU

RD843

The RD843 is a single-chamber, fixed-thrust, restartable liquid-propellant engine developed by Yuzhnoye SDO to produce thrust and control the pitch and yaw of launch vehicle upper

Propellants	NT + UDMH
Vacuum Thrust	0.25 tf
Specific Impulse (vacuum)	315.5 s
Propellant Mixture Ratio	2.0
Number of Starts	8 (expandable)
Engine Weight (without gimbal actuators/frame)	16.5 kg
TRL	9

flight proven · TRL 9 price on request

YUZHNOYE DESIGN BUREAU

RD860

The RD860 is a single-chamber, restartable main engine with a pneumatic pump feed system developed by Yuzhnoye SDO for thrust production and flight control of upper stages, space t

Propellants	NT + UDMH
Vacuum Thrust (main mode)	0.5 tf
Vacuum Thrust (throttled mode)	0.25 tf
Specific Impulse main/throttled (vacuum)	322.5 / 316 s
Propellant Mixture Ratio	2.25
Number of Starts	10 (depends on onboard gas capacity)
Engine Weight (excl. gimbal actuators)	34 kg

TRL 6 price on request

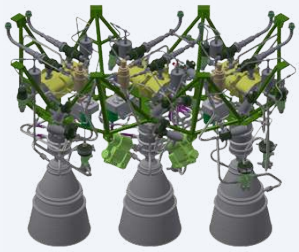
YUZHNOYE DESIGN BUREAU

RD860L

The RD860L is a restartable dual-assembly main engine with a pneumatic pump feed system developed by Yuzhnoye SDO for lunar upper stage and lander propulsion requiring both main th

Propellants	NT + UDMH
Vacuum Thrust (main mode)	1 tf
Vacuum Thrust (throttled mode)	0.25 tf
Specific Impulse main/throttled (vacuum)	322.5 / 316 s
Propellant Mixture Ratio	2.25
Configuration	Two assemblies: DB-1 (stationary) + DB-2 (gimballed)
Number of Starts	10 (depends on onboard gas capacity)

TRL 6 price on request



YUZHNOYE DESIGN BUREAU

RD860M

The RD860M is a restartable three-assembly cluster main engine with a pneumatic pump feed system developed by Yuzhnoye SDO for lunar lander propulsion applications. It forms a clus

Propellants	NT + UDMH
Vacuum Thrust (main mode)	0.5 tf
Vacuum Thrust (throttled mode)	0.25 tf
Specific Impulse main/throttled (vacuum)	322.5 / 316 s
Propellant Mixture Ratio	2.25
Configuration	3 assemblies: DB-1 (stationary) + DB-2 (gimballed) + DB-3 (stationary)
Number of Starts	10 (depends on onboard gas capacity)

TRL 6 price on request

YUZHNOYE DESIGN BUREAU

RD861K

The RD861K is a restartable main engine with turbopump feed system developed by Yuzhnoye SDO, using a gas generator cycle with exhaust generator gas injected into the supersonic no

Propellants	NT + UDMH
Vacuum Thrust	7.916 tf
Specific Impulse (vacuum)	330 s
Propellant Mixture Ratio	2.4
Number of Starts	5
Engine Weight	214 kg
Feed System	Turbopump (gas generator cycle)

TRL 8 price on request

YUZHNOYE DESIGN BUREAU

RD870

The RD870 is a single-chamber dual-thrust staged combustion cryogenic rocket engine developed by Yuzhnoye SDO, designed as the primary propulsion unit for the Cyclone-4M and Cyclon

Propellants	O2 + kerosene
Sea Level Thrust	79.3 tf
Vacuum Thrust	89.4 tf
Specific Impulse (sea level)	301.5 s
Specific Impulse (vacuum)	340 s
Propellant Mixture Ratio	2.68
Number of Starts	1

TRL 6 price on request

YUZHNOYE DESIGN BUREAU

RD872

The RD872 is a single-chamber dual-thrust staged combustion cryogenic rocket engine developed by Yuzhnoye SDO for second stage propulsion applications across the Cyclone-5 and Maya

Propellants	O2 + kerosene
Vacuum Thrust	93 tf
Specific Impulse (vacuum)	350.5 s
Propellant Mixture Ratio	2.6
Number of Starts	1
Engine Weight (incl. mounts and gimbal actuators)	1,530 kg
Cycle	Staged combustion, dual-thrust

TRL 6 price on request

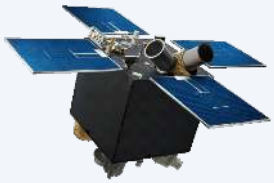
YUZHNOYE DESIGN BUREAU

RD874

The RD874 is the integrated first stage propulsion system for Cyclone-4M and Cyclone-5 launch vehicles, comprising four clustered RD870 engines that together provide roll, pitch, a

Propellants	Liquid oxygen + kerosene
Sea Level Thrust	319.2 tf
Vacuum Thrust	356.4 tf
Specific Impulse (sea level)	303.2 s
Specific Impulse (vacuum)	338.7 s
Propellant Mixture Ratio	2.68
Number of Starts	1

TRL 6 price on request



YUZHNOYE DESIGN BUREAU

Sich-2-1 (Sich-2-30)

The Sich-2-1 satellite is developed under Ukraine's National Special-purpose Scientific and Technical Space Program for obtaining visible and near-infrared Earth surface imag

Total Mass	155 kg
Payload Mass	35.5 kg
Orbit Type	Sun-synchronous
Orbital Altitude	500 to 600 km
Orbital Inclination	SSO +/-0.1 deg
Local Mean Solar Time	10:00 +/- 60 minutes
Attitude Control	3-axis active

price on request

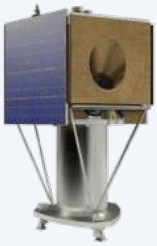
YUZHNOYE DESIGN BUREAU

Sich-2-30 Earth Observation Satellite

Ukrainian Earth remote sensing satellite developed by Yuzhnoye Design Bureau; launched January 2022 on Falcon 9.

Type	Earth observation / remote sensing satellite
Payload	Optical imager + ionospheric monitoring instrument
Launch	January 2022, Falcon 9 Transporter-3 rideshare
Developer	Yuzhnoye Design Bureau, Dnipro, Ukraine

price on request



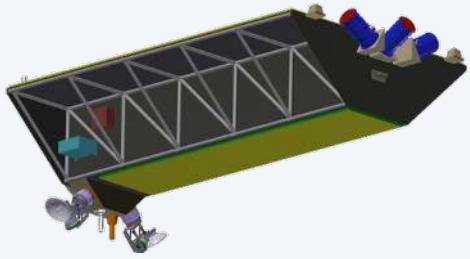
YUZHNOYE DESIGN BUREAU

Sich-3-O

The Sich-3-O is a high-resolution optical Earth observation satellite developed by Yuzhnoye SDO that will obtain super-resolution digital panchromatic and multispectral visible ima

Total Mass	~290 kg
Orbit Type	Sun-synchronous
Orbital Altitude	~500 km
Attitude Control	3-axis active
Attitude Actuators	Reaction wheels, magnetic actuators
Off-axis Maneuver Capability	+/-45 deg
Panchromatic Resolution	0.5 m at nadir

price on request



YUZHNOYE DESIGN BUREAU

Sich-3-R

The Sich-3-R is an Earth radar observation satellite developed by Yuzhnoye SDO that will obtain high-resolution radar images of the Earth's surface regardless of lighting con

Total Mass	1,800 kg
Orbit Type	Sun-synchronous (morning-evening)
Orbital Altitude	450 km
Attitude Control	3-axis active
Attitude Actuators	Reaction wheels, magnetic actuators
Roll Angle Capability	+/-60 deg
Attitude Accuracy	0.05 deg

price on request

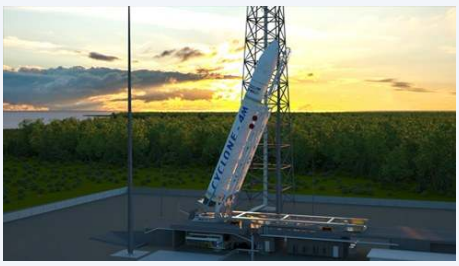
YUZHNOYE DESIGN BUREAU

SLS Airborne Basing

The Space Launch System (SLS) Airborne Basing is a concept developed by Yuzhnoye SDO for launching light-class integrated launch vehicles from carrier aircraft at altitude. The sys

Vehicle Class Supported	Light-class
Maximum Mission Duration	20 days
Maximum Flight Time to Launch Point	5 hours

price on request



YUZHNOYE DESIGN BUREAU

SLS Mobile Basing

The Space Launch System (SLS) Mobile Basing is a road-mobile launch solution developed by Yuzhnoye SDO for launching meteorological rockets to altitudes up to 100 km. The mobile la

Application	Meteorological rockets to 100 km altitude
Vehicle Configuration	6x2 or 6x4 wheeled
Diesel Engine Power	250 to 400 kW
Emission Standard	Euro 5
Cruising Range	900 km

price on request

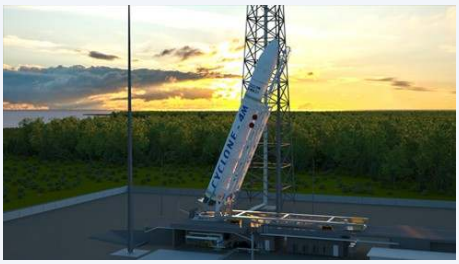
YUZHNOYE DESIGN BUREAU

SLS Sea Basing

The Space Launch System (SLS) Sea Basing is a maritime launch infrastructure concept developed by Yuzhnoye SDO for conducting prelaunch processing and launches of medium-class inte

Vehicle Class Supported	Medium-class
Annual Launch Capacity	12 launches/year
Maximum Mission Duration (excl. transit)	25 days
Operational Temperature Range	10 to 35 deg C
Maximum Wave Height at Launch	2.5 m
Maximum Wind Speed at Launch	10 m/s

price on request



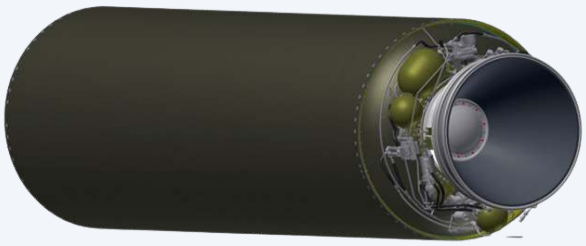
YUZHNOYE DESIGN BUREAU

SLS Stationary Basing

The Space Launch System (SLS) Stationary Basing is a ground launch infrastructure solution developed by Yuzhnoye SDO intended to conduct prelaunch processing and launches of integr

Annual Launch Capacity	12 launches/year
Maximum Mission Duration	25 days
Max Prelaunch/Launch Operations	3 days
SC Processing Air Temperature	+18 to +25 deg C
SC Processing Relative Humidity	Up to 80%
SC Processing Cleanliness Class	ISO Class 8
Ambient Temperature Range	-50 to +50 deg C

price on request



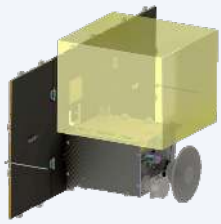
YUZHNOYE DESIGN BUREAU

Solid Rocket Motors for Space Launch Vehicles

Yuzhnoye SDO develops and manufactures a family of solid-propellant main engines for space launch vehicles and orbital reboost stages. These include high-energy composite propellan

Main SLV Engine Propellant	Composite, high-energy
Main SLV Engine Max Diameter	Up to 2,000 mm
Main SLV Engine Max Thrust	Up to 150 tf
Main SLV Engine Casing	Carbon fiber-reinforced plastic (cocoon type)
Main SLV Engine Nozzle	Swiveling control nozzle
Reboost Stage Engine Max Diameter	Up to 1,250 mm
Reboost Stage Engine Max Thrust	Up to 10 tf

price on request



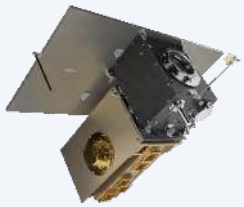
YUZHNOYE DESIGN BUREAU

YuzhSat Universal Spacecraft Bus

The YuzhSat is a universal spacecraft bus platform developed by Yuzhnoye SDO for creating microsatellites up to 50 kg total mass for scientific, technological, and Earth observatio

Bus Mass	30 kg
Maximum Payload Mass	Up to 20 kg
Orbital Altitude Range	450 to 1,000 km
Orbital Inclination Range	0 to 180 deg
Maximum Payload Power	80 W
Daily Average Payload Power	20 W
Data Transmission Rate	50 Mbit/s (X-band)

price on request



YUZHNOYE DESIGN BUREAU

YuzhSat-1

The YuzhSat-1 is a 38.4 kg microsatellite developed by Yuzhnoye SDO carrying the Aerosol-UA scientific payload for global monitoring of atmospheric aerosol characteristics and dist

Total Mass	38.4 kg
Orbit Type	Circular sun-synchronous
Orbital Altitude	~705 km
Orbital Inclination	~98.1 deg
Attitude Control	3-axis active (magnetorquers + reaction wheels)
Orientation Accuracy	0.2 deg
Payload Power (max)	80 W

price on request

Contact Yuzhnoye Design Bureau

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

`https://newspacemarket.com/companies/yuzhnoye/`

`https://www.yuzhnoye.com`