

# Pneumatic UAV launching system GLS-1A

The pneumatic catapult launching system GLS-1A is designed to launch unmanned aerial vehicles with a takeoff weight of up to 40 kg at a speed of 17 m/s (61 km/h). At the same time, the launch speed of a lighter UAV can be higher, up to 20 m/s (72 km/h).

20 m/s (72 km/h) max. launch speed of a UAV

Launches UAVs with a takeoff weight up to 40 kg

Operates autonomously

Able of operating under various weather conditions



# System

## features and technologies

The pneumatic catapult GLS-1A is capable of launching UAVs from limited areas with a ground covering, under various weather conditions, at any time of the day in the temperature range from  $-25^{\circ}$  to  $+40^{\circ}$  C.



### Launches UAVs with a takeoff weight up to 40 kg

Pneumatic catapult can launch UAVs with a takeoff weight of up to 40 kilograms.



### 20 m/s (72 km/h) max. launch speed of a UAV

The launch speed of the UAV can reach 20 m/s (72 km/h).



### Ability to operate autonomously

The unit operates autonomously and is powered by a gasoline or diesel generator.



### Capable of operating in harsh temperature conditions

From  $-25^{\circ}$  C to  $+40^{\circ}$  C.



### How it works:

The system operates autonomously and is powered by a gasoline or diesel generator with a rated power of 2 kW with a 220 V 50 Hz AC supply voltage. The launch control is performed using a remote control panel. Pumping of the gas cylinder with air up to a given pressure can be carried out both in automatic and manual modes. The pressure level in the cylinders is controlled by pressure gauges. One of them is installed directly on the compressor station, and the second is located on the control panel.

The compressor station has the possibility of a forced emergency pressure relief. A safety valve is installed at the compressor station, which triggers when the system pressure exceeds 12 bar. When the air is pumped into the cylinders, the carriage with the launched UAV on it is countered by a safety pin, which is pulled out immediately before starting.

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# Technical

## details

### Launcher specifications:

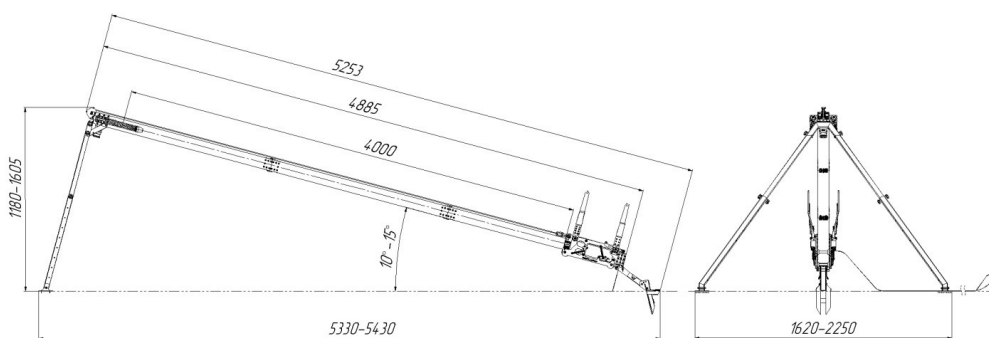
Maximum weight of the launched UAV (with a speed of 17 m/s).....	40 kg
Maximum launch speed of the UAV.....	20 m/s (72 km/h)
Range of ambient working temperatures.....	-25 °C +40 °C
Launch angle of the rail relative to the ground.....	15°
Length.....	5.4 m
Width.....	2.3 m
Height.....	1.6 m
Overall length of the rail.....	4.9 m
Carriage stroke.....	4 m
Rail weight.....	51 kg
Carriage weight.....	8 kg
Launcher overall weight (including pegs, strapping ropes, safety pin).....	62 kg
Time of the catapult assembling and the compressor station connecting.....	15 min
Number of people required for the launching system assembling.....	2 people
Number of people required to move catapult and compressor station in cases.....	3 people
Pumping time up to 10 bar and ready for the UAV launch.....	20 min

### Compressor station technical data:

Maximum allowable working pressure in tank.....	12 bar
Maximum compressor pressure.....	22 bar
Compressor power supply.....	220 V 50 Hz
Compressor rated current.....	8 A
Maximum compressor power.....	1.83 kW
Average run interval.....	15 min
Control cable length.....	10 m
Hose length.....	1.4 m
Hose weight.....	3.2 kg
Weight of the control panel.....	1 kg
Total weight of the compressor station.....	100 kg

### Transportation and storage:

Dimensions & weight of the transport case for the pneumatic catapult.....	1733x583x335 mm (24 kg)
Dimensions & weight of the transport case for the compressor station.....	1733x583x680 mm (33 kg)
Total weight of the pneumatic catapult with transport case.....	87 kg
Total weight of the compressor station with transport case.....	133 kg
Total weight of the complex in transportation form.....	220 kg
Total weight of the launching system (without transportation cases and auxiliary equipment).....	135 kg
Weight of auxiliary equipment, repair kit, and consumables.....	25 kg



Want to know more?

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