

Reliable and Easy UAV Launcher

UAV DC4 Launcher



A launching device for unmanned aerial vehicles (UAV), specifically developed by RUAG Aviation, allows for full operational flexibility in the deployment of UAV. The DC4 launcher features a compact design for easy manoeuvrability, is self-contained and operates independently of external power sources. The unit proves reliable, simple to maintain and cost efficient.

Built-in flexibility

The DC4 UAV launcher is readily adaptable, from payload to functionality.

- The base construction allows the launcher to be built onto fixed surfaces (pedestal, base frame), a truck loading bridge, or trailers.
- The hydraulic power unit, comprised of a nitrogen and hydraulic circuit, accommodates UAVs with a weight of up to 350 kg.
- Maximum take-off speed for a payload of 200 kg averages 55 m/s.
- Nitrogen pressure is controlled by a built-in mechanism which adjusts the launching characteristics to conform to the respective UAV and environmental influences.
- The drive unit consists of an hydraulic cylinder with a block and tackle system for accelerating the carriage of the UAV up the 18 m launch rail.
- Post launch, the DC4 can be automatically reloaded in preparation of the next UAV launch.
- The stowing and deployment of the 18 m launch rail is managed by hydraulics, ensuring compact dimensions and significantly improved handling.

Reliable operation

On-site, the launcher can be deployed quickly and efficiently by means of the integrated control panel located on the base of the unit. Power activation and launch configuration parameters are set manually using the control panel. Safety dictates that the actual launch is performed using a remote control device. All relevant data for the successful launch is displayed on the system.

Technical Data

Weight and speed

Maximum payload	350 kg
Maximum launch speed for a payload of 200 kg	55 m/s

UAV launcher specifications

Maximum operating pressure	350 bar
Length in launch configuration	18 m
Height in launch configuration with 0.9-m high base frame and 9° elevation	3.8 m
Length in transport configuration	5 m
Height in transport configuration without base frame	1.7 m
Width	2 m
Total weight	4500 kg
Acceleration length	13.5 m
Elevation angle (dependent on base frame)	5° – 15°
Operating voltage	24 VDC
Operating temperature	-30°C to 50°C
Storage and transport temperature	-35°C to 70°C

