

KZO

Precise information. Reliable decision.

In modern conflicts, new situations can develop with little prior warning. Taking the necessary action at very short notice involves monitoring events at high speed and passing on the information gathered in real time to the appropriate levels within the command structure. Detailed knowledge of the tactical situation is a prerequisite for the success of any mission.

The KZO was developed with these considerations very much in mind. KZO is a reliable system for high-precision reconnaissance targeting and damage assessment for intheatre operations. Since 2009, it has served as a tactical UAS for the German Armed Forces in Afghanistan.

It provides reliable aerial reconnaissance results in real time:

- At any time of the day or night
- · In almost any weather conditions
- · Anywhere in the world in any climate
- · Over distances of 100 km or more under threat

These data are then evaluated online at a Ground Control Station and passed on to the appropriate levels of the command structure in sufficient time to permit an assessment (or reassessment) of the tactical situation.

The KZO system provides the operator and the tactical commander with a high degree of support in fulfilling the task of obtaining full situational awareness. The high mobility of the system and flexibility in preparation of the mission allows optimised adaptation to rapidly changing tactical situations. The high performance of the Ground Control Station gives maximum assistance to the operator during the tasks of mission planning, mission execution and aerial image analysis.

The system is capable of providing the necessary data formats for many modern interoperable C4I networks and databases.

Ground Control Station

- 3 workstations, dedicated respectively to:
 - Mission planning
 - Mission monitoring
 - Image evaluation
 - NBC-/(N)EMP-hardened shelter
 - C4I link
 - Storage of mission data for subsequent assessment





Ground Data Terminal

- · Link between Ground Control Station and the UAV
- · Jam-resistant data transmission in real time

Launcher Vehicle

- · Automatic pre-flight test
- Booster-assisted launch in winds of up to 15 m/sec (+squalls of 10 m/sec) regardless of the wind direction
- · Catapult launch option

Refurbishing Vehicle

- Supports maintenance level 2 (MES2) repair and maintenance work
- · Post-flight testing and refurbishing
- · Computer-controlled test procedures
- NBC-/(N)EMP-hardened shelter

Payload

- Thermal imager system 8–12 μm or 3–5 μm
- Three fixed-focus TV cameras (6 FoV)
- · Stabilisation along three axes
- · Image de-rotation
- Continuous zoom

Data Link

- · Broadband, jam-resistant
- Range >140 km
- · Full duplex operation



Technical Data

Wing span	3.42 m
Length	2.25 m
Launch weight	161 kg
Payload weight	35 kg
Max. airspeed	approx. 220 km/h
Typical speed	approx. 150 km/h
Endurance	5.5 h
Max. service ceiling	3,500 m above sea level
Data-link range	>140 km
Engine	Two-stroke, 24 kW
Anti-icing	Hot air
UAV structure	Composite-stealth material
Launch	Booster or catapult
Landing	Parachute and airbag





