Custom Unmanned Solutions

XER
Technologies

X8
HEAVY DUTY
UAS

COMPANY

Xer Technologies AG (Switzerland) is dedicated to develop, produce and market heavy-duty and customisable unmanned aerial system (UAS) solutions that enables our customers to generate actionable data insights and creates a safer, efficient and sustainable world. We also have offices in Singapore and in Helsingborg, Sweden, where the company has resided over the past decade.

Xer delivers the most heavy-duty hybrid-electric multirotor UAS on the market. Whatever your mission, you can be ready to fly in minutes, stay airborne for hours, carry heavy payloads and handle adverse weather conditions. X8 can extend the UAS operation Beyond Visual Line of Sight (BVLOS) and can replace helicopters and other manned vehicles for a range of missions, so you can expand your business capabilities while reducing risks, costs and energy use.

A **NEW BREED** OF UAS

TOUGHER WITH MORE POWER

MORE WHERE YOU NEED IT

Up To 2.5hrs Flight Time

The hybrid engine provides the power for missions up to 2.5hrs flight time with 4kg payload on a single tank

Weather Resilient

The heavy-duty construction of X8 means your team can execute missions, whatever the weather throws at you

Up To 7kg Payload

Thanks to the unique design and powerful hybrid engine, you can carry up to 7kg payloads for longer than ever before

SOFTWARE & AI

The Xer UAS platform connects with software solutions which empower your organisation to plan missions, store flight data and sensor content. All information is easily accessible through a scalable cloud platform with intuitive visualisation tools.

Additionally, Xer can tailor artificial intelligence software for your sensor content and data, truly enhancing the value of your missions and providing powerful actionable data for your organisation.

CUSTOM SENSOR CONFIGURATIONS

Xer's UAS solutions are fully customisable to meet the needs of any use case. Our UAS can carry almost any sensor, including high definition cameras, multispectral sensors, LiDAR, IR sensor, Ground Penetrating Radar (GPR), sonars, etc... With a 7kg payload capability the X8 can carry single, or multi-sensor configuration based on your application requirements.

Fly further? Use SatCom? Night-time flights? Let us help. We love a challenge – just like our UAS!

APPLICATIONS

INFRASTRUCTURE INSPECTION

Xer UAS make inspecting and monitoring large-scale infrastructures such as railroads, pipelines and powerlines more efficient than ever. With 8-10 times longer flight time compared to conventional UAS, Xer opens up entirely new possibilities. Our UAS allows you to inspect critical infrastructure over vast areas for defects, assembly errors and hazardous vegetation growth without the hassle of battery swaps.

Coupling long-distance missions with a wide range of sensor payloads, our UAS will deliver unprecedented levels of visual inspection. In addition, the X8 can in many cases replace helicopters whilst reducing cost, CO_2 and risk to life. Xer enables the future of infrastructure inspection.
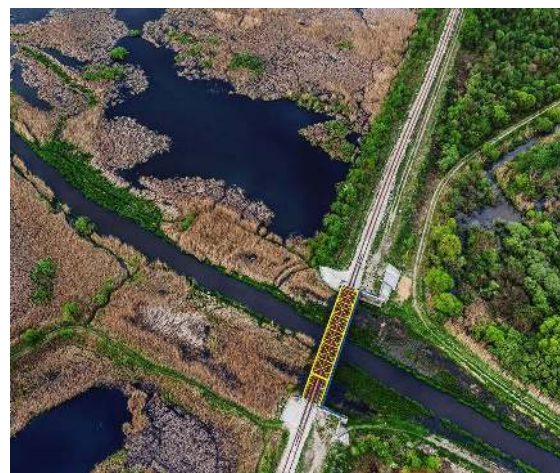
SEARCH & RESCUE

Xer UAS take search and rescue to a higher plane. With easy and fast deployment, first responders can take to the sky in minutes and stay airborne for several hours, increasing their reach and ability to capture detailed rescue related data.

Xer minimises risks in extreme weather and dangerous terrain during rapid response missions. Its highly flexible design can carry a wide range of payloads allowing pilots to drop life-saving equipment such as first aid kits, lifeboats or defibrillators to intended targets.

PUBLIC SAFETY

Xer is driving UAS technology for law enforcement and public safety departments. Emergency agencies can now more effectively use UAS where deploying ground personnel is deemed too risky. Safety teams can be first on location with eyes-in-the-sky for sensitive accidents and crime scenes, and maintain critical vantage points over chaotic situations while capturing critical data and evidence.

Along with superior flight time, Xer's UAS platform can be equipped with premium cameras and thermal imaging to effectively monitor dense areas when locating missing persons or tracking suspects.

X8 SPECIFICATIONS

Height:
62 cm / 2.03 ft

Length/Width: 203 cm / 6.66 ft

GENERAL SPECIFICATIONS

Length/Width:	
- flight mode	203cm / 6.66ft
- transport mode	60cm / 2.03ft
Height	62cm / 2.03ft
Frame	Full carbon-fibre exoskeleton
Transport mode	Foldable quick-release arms
Take-off preparation time	2 minutes

Low electromagnetic and vibrational profile (enabling high quality sensor integration)

Safety systems
- Redundant co-axial electric motors
- Integrated collision avoidance system
- Fully autonomous parachute deployment
- Battery for emergency landing

Maintenance interval
- 100 hours maintenance interval (done by customer)
- 200 hours engine maintenance

STANDARD PERFORMANCE

Weather resistance: capable of flying in harsh wind up to 65km/h (35knots, 18m/s) and rain and snow conditions

Temperature range: -20 to +35 ℃

Flight time vs payload
- 2.5 hrs (@ 4kg payload)
- 2.0 hrs (@ 5kg payload)
- 1.1 hrs (@ 7kg payload)

Max speed: 72 km/h (39 knots; 20m/s)

Propulsion
- Custom build hybrid-electric based on 2-stroke engine
- Remote engine start from control station

Standard electronics equipment
- Radiolink (C2 and payload data): 433 MHz / 2.4 GHz (Europe) with 20km range (US compliant version available on demand)
- ArduPilot flight control system
- Dual RTK GNSS
- Xer active health status monitoring system
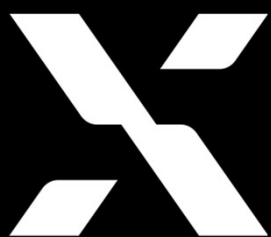
OPTIONAL CONFIGURATIONS

Xer offers integrated payload mounting brackets and ready-made power and communication connectors for integration of almost any sensor system

Examples of sensor payload customisation possibilities
- Multi-sensor configuration
- Mapping (LiDAR + high-res camera)
- Search & Rescue (EO/IR, rangefinder, IMSI catcher, ViDAR)
- External load with winch
- ISR (Intelligence, Surveillance and Reconnaissance) systems
- Ground Penetrating Radar (GPR)
- Multi-, hyper-spectral
- Radioactive and gas detectors
- Sonar sensor
- Bathymetry LiDAR

Optional equipment
- Emergency floatation device
- ADS-B In/Out transponder
- LTE (4G/5G)
- Sat Com
- High precision positioning system
- Extra fuel tanks for long range and/or long flight time missions

GET HEAVY