

# HUGIN Endurance AUV sets sail for pioneering sea trials



Kongsberg Discovery has embarked on an ambitious journey, commencing an extensive series of sea trials with its latest groundbreaking creation: the HUGIN Endurance autonomous underwater vehicle (AUV). Launched in 2021, the HUGIN Endurance represents the pinnacle of innovation in Kongsberg Discovery's esteemed HUGIN AUV family.

Measuring an impressive 11 metres in length, with a diameter of 1.2 metres and a robust 8,000kg weight capacity, the HUGIN Endurance is engineered to explore the depths, reaching an astounding 6,000 metres below the ocean's surface. What sets this AUV apart is its exceptional long-range capabilities, covering an expansive 2,200km or 1,200 nautical miles in autonomous multi-role missions.

In the words of Martin Wien Fjell, president of [Kongsberg Discovery](#): "With HUGIN Endurance, we are pushing the boundaries for autonomous over-the-horizon AUV operations. There are countless possible underwater applications, including geophysical, environmental, hydrographic, naval, security, critical asset inspection and search-and-rescue operations. Although we only launched the development project in 2021, thanks to our more than 30 years of experience in [AUV](#) technology, we've been able to develop a transformative product within a very short time. To see it in the water, responding as expected, is very exciting."

## Array of sensors and features

This extraordinary AUV is aptly named Endurance, which certainly reflects its purpose. Its long-range capability presents a significant cost benefit, eliminating the need for a mother ship for launching, monitoring and recharging. This not only reduces project costs and carbon footprint, but also expands the operational window significantly.

The HUGIN Endurance comes equipped with an extensive array of sensors for survey campaigns. Its versatility is a hallmark, allowing it to accommodate various payload configurations for seabed mapping, oceanography profiling, pre-surveys for offshore wind parks or as a surveillance tool for critical subsea infrastructure and ecosystem changes.

Beyond its high-end features, the [HUGIN Endurance](#) retains the proven capabilities found across Kongsberg Discovery's HUGIN range. It is equipped with Kongsberg's Sunstone inertial navigation system (INS) for precise underwater positioning, designed for extended autonomous operation without position updates from external sources. In the realm of communication, the HUGIN Endurance stands out. It can communicate acoustically with pre-deployed transponders and surface vessels when submerged and offers RF and satellite connectivity when at the surface.

The AUV has drawn significant attention from both the defence and commercial sectors. The first unit is slated for delivery in early 2024, with discussions underway with several potential customers for further deliveries. The HUGIN Endurance is poised to revolutionize underwater exploration with its exceptional capabilities and long-range reach, marking a new step in autonomous over-the-horizon AUV operations.



The first HUGIN Endurance being prepared for sea trials. (Image courtesy: Kongsberg Discovery)