MISSION SPECIALIST Navigation

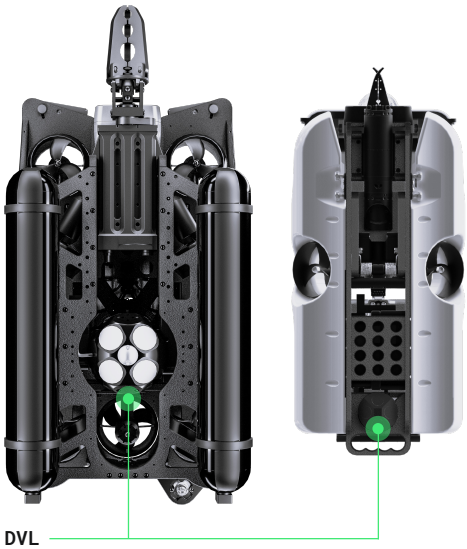
The Mission Specialist Navigation Package integrates a Doppler Velocity Log (DVL), which allows for autonomous control and maintaining the ROV's position underwater with superior bottom tracking and range. Defender systems include a GNSS receiver, which corrects any position drift caused by environmental/operational factors whenever the ROV is on the surface.

The Greensea IQ software upgrade seamlessly integrates these sensors, offering station keeping/ dynamic positioning, mission planning, waypoints, markers, and data export. An Ultra Short Baseline (USBL) system can be added for deployments beyond the DVL's range.

_DVL Specifications - Defender

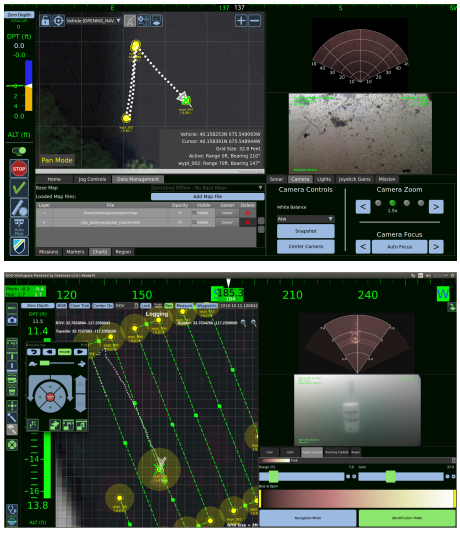
LONG-TERM ACCURACY	±0.1% / ±0.1 cm/s
OPERATING FREQUENCY	500 kHz
BEAM ANGLE	25°
CONFIGURATION	4-beam Janus array convex transducer
BOTTOM TRACK MIN/MAX(1)	~0.3 - 100 m (1 - 328 ft)(2)
DEPTH RATING	300 m (984 ft), 6 km optional
DRY WEIGHT	1.7 kg (3.8 lbs)
WEIGHT IN WATER	0.3 kg (2.2 lbs)

1. Working altitude varies with conditions. 2. 0.1 - 175m manufacturer rating when not mounted.



_DVL Specifications - Ally

LONG-TERM ACCURACY	±1.01%
OPERATING FREQUENCY	1 MHz
BEAM ANGLE	22.5°
CONFIGURATION	4-beam Janus array convex transducer
ALTITUDE MIN/MAX	0.05 - 50 m (2 in - 164 ft)
DEPTH RATING	300 m (984 ft), 600 m optional
DRY WEIGHT	0.17 kg (0.4 lbs)
WEIGHT IN WATER	0.105 kg (0.2 lbs)



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