



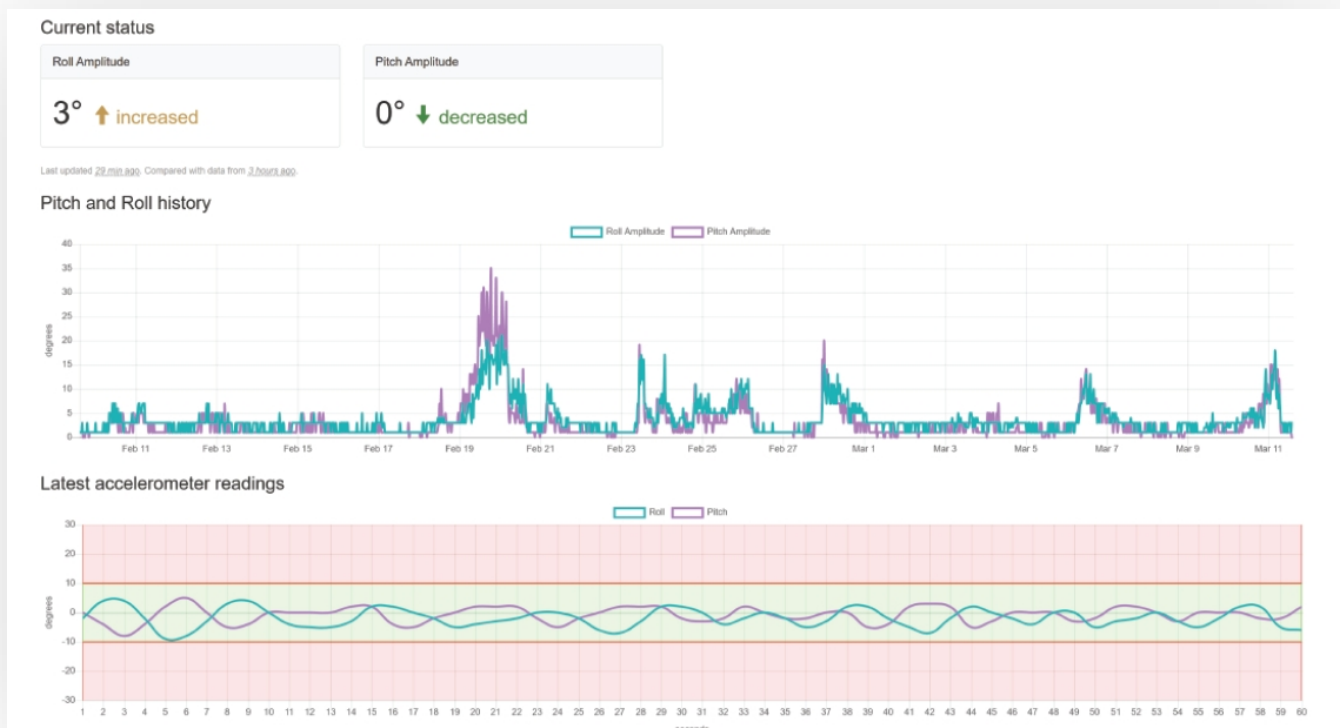
**Clearwater**  
DYNAMICS

LIVE PITCH & ROLL MONITORING



# Live Pitch & Roll Monitoring

Unlocking the internal accelerometer within the Raptor and using edge computing, your vessels pitch and roll amplitude can be sent back to shore every 30 minutes (configurable). This data is available through an API should you wish to build internal dashboards and is also visible in the Clearwater web portal. This service can be set up for individual vessels and requires no additional hardware deployment if Raptor is already installed.



## Actionable insights from real-time data

Vessel pitch and roll data is visualised in the Clearwater Portal. The screenshot illustrates a historic representation of the vessels pitch and roll movements for up to one month. A sixty second snapshot of the vessels latest accelerometer readings can also be requested by the user at any time to visualise current pitch and roll movements.



## Detect hazardous rolling conditions

Early warning of hazardous conditions, such as parametric rolling mitigates the risk to cargo and helps to prevent capsizing.



## Improve crew welfare (Social Governance)

Ships crew are exposed to excessive levels of shock due to the natural conditions that result from ships movement on the sea. Pitch and roll data from Raptor can assist with identifying crew that have been on board vessels experiencing extended durations of heavy sea conditions. Facilitates analysis of which crew members have been exposed to high levels of impact.

# How does it work?

## STEP 1

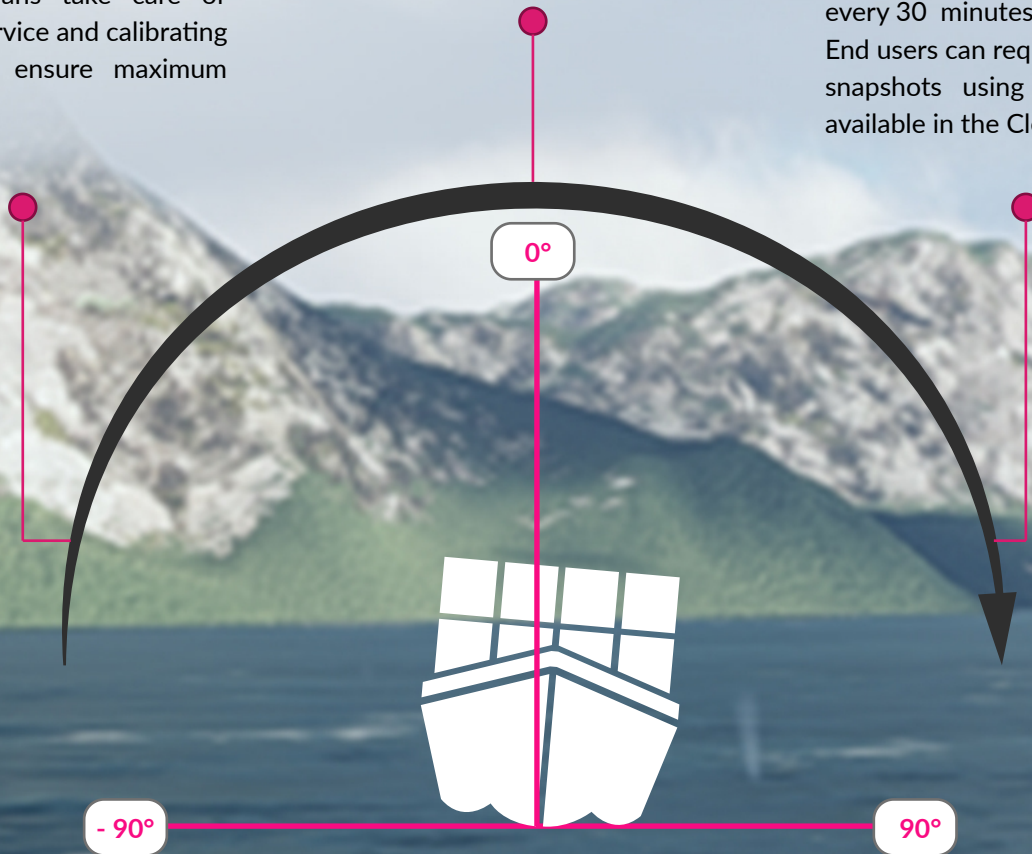
Following subscription to pitch and roll, our technicians take care of uploading the service and calibrating the terminal to ensure maximum accuracy.

## STEP 2

On completion of setup, pitch and roll data will instantly be available in the Clearwater portal and the API.

## STEP 3

Pitch and roll data will report every 30 minutes (configurable). End users can request 60-second snapshots using the options available in the Clearwater portal.







Link House, 25 West Street, Poole, BH15 1LD, UK