GRiD

LOCKHEED MARTIN

# Lockheed Martin
## GRiDCASE 1570

Lockheed Martin utilised the capabilities of the GRiDCASE 1570 to help support their Warship Electronic Chart Display and Information System (WECDIS) solution installed across a number of Royal Navy vessels.

# Project Background

A leader in systems integration, Lockheed Martin work on major programmes spanning the aerospace, defence and civil sectors. Lockheed Martin approached GRiD to assist with the upgrade of their Warship Electronic Chart Display and Information System (WECDIS), a state-of-the-art navigation system that has been deployed across more than 90 ships and submarines from both the Royal Navy and the Royal Fleet Auxiliary. WECDIS provides the navigation teams with an integrated electronic navigation picture, greatly reducing navigator workload and increasing situational and tactical awareness for the crew.

# Project Requirements

To enable the seamless operation of the WECDIS platform, each individual component was subject to strict regulations to ensure that interference with existing electronics/communication systems was eliminated.

For this particular project, Lockheed Martin required a rugged server that would act as the processor for the situational awareness element of the navigation system. They also needed something that could support the operating system without worry over any obsolescence in the equipment.

To be able to interact with both systems and a human interface, the processor had to house multiple ethernet and serial ports whilst continuing to ensure that EMC and Environmental standards were maintained as the device was located within the vessel's control room.

# Why GRiD?

For this programme GRiD provided the GRiDCASE 1570, a fully rugged and customisable processor, compliant with both MIL-STD-461 and DEF STAN 59-411 for EMC and DEF STAN 00-35 and MIL-STD-810 for Environmental.

With the ability to house custom interfaces alongside seven circular military rear connectors individually configured to suit the customer specification, the GRiDCASE 1570 became the link between the navigational system and readable, actionable data.

As with the rest of GRiD's products, the GRiDCASE 1570 is created with modular flexibility and a long lifespan, enabling easy integration into both new and established systems without the fear of obsolescence or a requirement to upgrade as system architecture is altered.