

Success Story - They Chose Apacer

Challenges

- Logistical challenges in terms of physical access
- Expensive manpower costs
- Sulfurous environment

Solutions

- SM210-M280
- SM230-25

Value-added technologies

- **Hardware:**
Anti-sulfuration modules
- **Software:**
SSDWidget 2.0
CoreAnalyzer2
- **Firmware:**
Firmware customization

The Customer and the Application: Offshore Oil Drilling

Our customer maintains and operates an offshore oil drilling platform located near Ireland. Due to the nature of offshore oil drilling, there were many challenges they faced in terms of day-to-day operations.



Challenges

An offshore oil drilling platform can be a dangerous place to live and work. Even a small malfunction could lead to a fire, an explosion or even extensive pollution. So the failure of a crucial component is something that must be prevented at all costs. And since power is supplied to the platform via an underwater cable, voltage can be unstable at times.

In addition to this, many oil workers live on the mainland and travel to an offshore rig by boat, so there are logistical challenges especially when the weather is poor. The dangerous nature of oil drilling means that salaries are often extremely high, and since the industry is unionized, overtime or weekend pay structures can be extremely costly to management.

What's more, certain parts of an offshore drilling platform have environments that are high in sulfur, which can corrode certain electronic components at alarming rates.

Solutions and Technologies

Our customer asked us if we could provide a SSD solution that was protected against sulfuration. After careful consideration, we recommended certain products which incorporate patented technologies that resist sulfuration. Unlike some of our competitor's modules where the silver components are simply covered with sulfur-resistant materials, our modules actually include special alloys in place of silver that sulfur cannot damage.

And to help the customer deal with the logistical challenges of reaching the oil rig to perform regular maintenance, we suggested that they take full advantage of our SSDWidget2.0 software. They set up a private server where all their Apacer SSDs could regularly upload their current status, then installed apps on their engineers' phones and computers so that their engineers could monitor the health of the SSDs remotely. By using this software to anticipate the end of an SSD's operational lifetime, the engineers could replace older modules before they failed. This meant both greater data integrity and less overtime due to unscheduled maintenance trips from the mainland to the oil rig.

Results and Benefits

The client reported that in the first year of using Apacer's SSDs, they logged significantly less overall SSD failures due to sulfuration. They also noticed a considerable reduction in overtime and manpower costs thanks to the remote SSD monitoring provided by SSDWidget2.0. Currently, we are in the process of collaborating with them on a custom order for even more resilient SSDs for use in future oil-drilling projects.

