Offshore Crane Camera

One Nature LLC was asked to create a new crane camera network for four cranes on an offshore oil rig.

The Requirements

• Use the previous camera system’s pendulum mount.

• Keep the cost as low as possible and to allow for safe & simple repairs, while keeping it durable for an offshore rig.

• The cameras are to be rated Class 1 Div 2 & Zone 2 for Hazardous Areas.
The Camera

The Moxa VPort 36 is a great IP Camera that is Class 1 Div 2 & Zone 2 without a housing. Its video is HD quality. Plus, the extended operating temperature is -40°C to 75°C without a heater or cooling fan.

The die cast aluminum alloy housing is also great to work with. The electricians appreciate how lightweight it is yet its strength, rigidity, and corrosive resistance offer great protection to the camera. It also provides excellent EMI & RFI shielding. The housing is IP68-Rated.

The camera is available with PoE (Power over Ethernet) which allows for the camera to be installed with only a single cable end-to-end and no middle junction box in-between the monitor and camera. This allows for greater simplicity in installation, usage, and troubleshooting.

Installer's note: In near-freezing temperatures, the clamshell housing requires the provided desiccant to prevent the humidity from condensing on the glass.
The Mount

We designed this heavy-duty stainless steel mount to fit tightly into the pendulum mount. This design has been slightly updated with the small protective box included to make a single piece, instead of two. This protective box can be seen if the picture to the right.

The camera was installed quickly and works great. A Crane Operator was asked, “Can you see well enough?” He replied, “Ray Charles would be able to see that!” Later, we heard the appreciative complaint, “I don’t need to count the hairs on their head.” The 1 Megapixel IP camera and HD monitor provides a clear view of the area below eliminating blind-spots.
The crane operator's cabin has power and is outside the hazardous area. We upgraded their view stations with an excellent product from Teguar.

The Teguar Touchscreen is mounted in a custom stainless steel enclosure. It features a 15” HD quality 1024x768 Resolution, and a Resistive Touchscreen with an IP66-Rated Front Bezel to withstand the abuse of an offshore oil rig environment.

The tough-touchscreen provides the operators quick and easy zooming capabilities and a clear picture.

One Nature LLC specializes in easy to install solutions for your production rigs. One Nature LLC is an IT Solutions Manufacturer, Consultancy, Value-Added Reseller, and a Veteran-Owned Small Business. We provide IP Camera Solutions to monitor incidents, protect assets, and manage health and safety.