xylem
Let's Solve Water

Offshore Wind Signalization Systems

FULL CONTROL OF YOUR SYSTEM, FROM ANY PLACE, AT ANY TIME

TIDELAND
a xylem brand

Navigational Aids

Marine lanterns

The robust design, proven electronic circuitry and highly efficient lens make the Nova 65 the lantern of choice for offshore wind applications. The Nova 65 has its own daylight switch and can be equipped with an internal GPS sensor. Its unique operation philosophy ensures that even in the event of a complete communication breakdown, lanterns will still switch on simultaneously, and will continue to flash in sync.

Nameplate floodlights

The Nameplate floodlight has an updated driver design based on the proven design of the UAL, which has been the standard of the very discerning WSV for nameplate lighting in Germany for many years. This allows for a full monitoring through the same local bus network that controls the other NavAid equipment. Featuring the same extreme reliability that made it the industry standard for nameplate lighting, the new driver allows it to switch on/off depending on the local sunset time, visibility and ambient light levels, and its operation can be locally and remotely monitored.

Helicopter corridor floodlights

The corridor floodlights are based on the proven helideck floodlight design. The sand-cast light alloy is extremely corrosion resistant, while the innovative design optimizes heat management, maximizing the life expectancy of the electronic components. The lenses are optimized for the purpose of corridor lighting, achieving optimum illumination of the windmill towers with low power usage and minimal glare to helicopter pilots. Modbus communication capabilities allow for remote activation, monitoring and seamless integration into the NavAid system.

Fog horn

With decades of proven offshore performance, the Tideland fog horn offers energy efficient and cost effective signalization during low-visibility conditions. The fog horn is over engineered, with drivers operating at only 10% of its rated capacity. The use of extremely durable materials, efficient and redundant electronic circuitry make the AB-560 an extremely reliable fog horn.

Visibility sensor

The Biral visibility sensor offers unparalleled performance. Its patented design minimizes the chances of false readings. Continuous low-power heating of the lenses eliminates any chance of condensation inside, while Pyrex glass protects them from the possibility of scratches. The use of anodized marine grade aluminium and a proven design make the Biral the visibility sensor of choice for offshore wind applications.

AIS

The V-20 Informer is a compact unit housed in a rugged environmental enclosure for use on any AtoN. It is available as both a type 1 (transmit only) and type 3 (transmit and receive) and can project both real and virtual targets.

RACON

The SeaBeacon® is a frequency agile radar beacon (RACON) and provides dependable service to all marine radars including those with modern narrow band receivers. The SeaBeacon® is the most advanced Racon available on the market and is unequalled in frequency matching accuracy, consistency, pulse-by pulse response and advanced sidelobe suppression. The SeaBeacon® is also available with integrated AIS as the e-Navcon, a complete electronic NavAid solution.

Boatlanding floodlights

Based on the same proven design as the corridor floodlights, the Tideland boat landing floodlights can be seamlessly integrated into the bus network and monitored and controlled remotely. The extremely corrosion resistant alloy is Teflon coated for increased corrosion resistance, while the over-engineered electronics, state-of-the-art LEDs and innovative passive cooling mechanism ensure years of reliable offshore operation.

Control cabinet

The Tideland Wind control cabinet offers a highly flexible, easy to integrate, and redundant control and monitoring solution for the NavAid system. The bus network allows for switching, monitoring and even in-depth troubleshooting of all Tideland equipment. The marine lanterns are synchronized by a pulse generated by the state-of-the-art Siemens PLC. Lanterns can be synchronized through GPS, which can be backed-up by network time servers for additional redundancy. Full performance data is available both locally and remotely, and the system can be diagnosed by remote desktop, allowing for thorough reparation for any maintenance that may need to be performed.

Power distribution and back-up

The Tideland power distribution configuration is tailored to the equipment connected to it. It offers 96 hours battery back-up. Each outgoing line is protected by surge arrestors. A state-of-the-art battery charger maintains the batteries fully charged at all times, while critical data such as voltage is available through the bus network.

Temporary Solutions

Thanks to highly efficient solar panels and state-of-the-art optics, our selfcontained lanterns perform well even at northern latitudes. They are available in a variety of colors, sizes and ranges, making the temporary marking of an offshore wind construction site a breeze.

Buoys

Besides cardinal buoys for marking the boundaries of the offshore wind farm, Tideland can offer integrated solutions including sensors from our sister companies from the greater Xylem Analytics organization, providing you with real-time data on waves, currents and water quality.

Self-contained NavAid lanterns

The lightweight and compact design of the SolaMAX-3 and SolaMAX-65 make ideal self-contained lanterns for temporary installations on offshore wind energy applications and for use on marker buoys. They provide years of maintenance-free operations. Revolutionary optics and high efficiency solar panels make the SolaMAX-3 and SolaMAX-65 even more suitable for northern latitudes and low solar radiation applications. The “smart” built-in controller allows for full monitoring and control functions via an infrared controller.

Aviation Lights

Aircraft warning lights

Tideland formed a partnership with Quantec to offer the most advanced aircraft warning light system, which can be fully integrated with the NavAid system. The lights are available as low and medium intensity, with optional infrared capability. They are in full compliance with both ICAO and local aviation regulations. These lights come with integrated GPS receivers for synchronization and the option to form a mesh network with the other lights, communicating local visibility data from the visibility sensor and adjusting their intensity accordingly. Any errors and messages can also be reported through the mesh, making the Quantec Aircraft Warning light systems the most advanced of its kind.

Helideck lighting

Since the acquisition of IMT in 2015, Tideland offers a complete portfolio of helideck lighting, fully compliant with the latest UK, European and international regulations. These products are renowned for their innovative designs, low maintenance requirements and durability in even the harshest offshore environments. The Tideland/IMT helideck lighting systems are fully compliant with international standards (ICAO Annex 14) as well as even the most stringent local regulations, including full compliance & certification for CAA CAP437, and have a decadelong offshore track record.

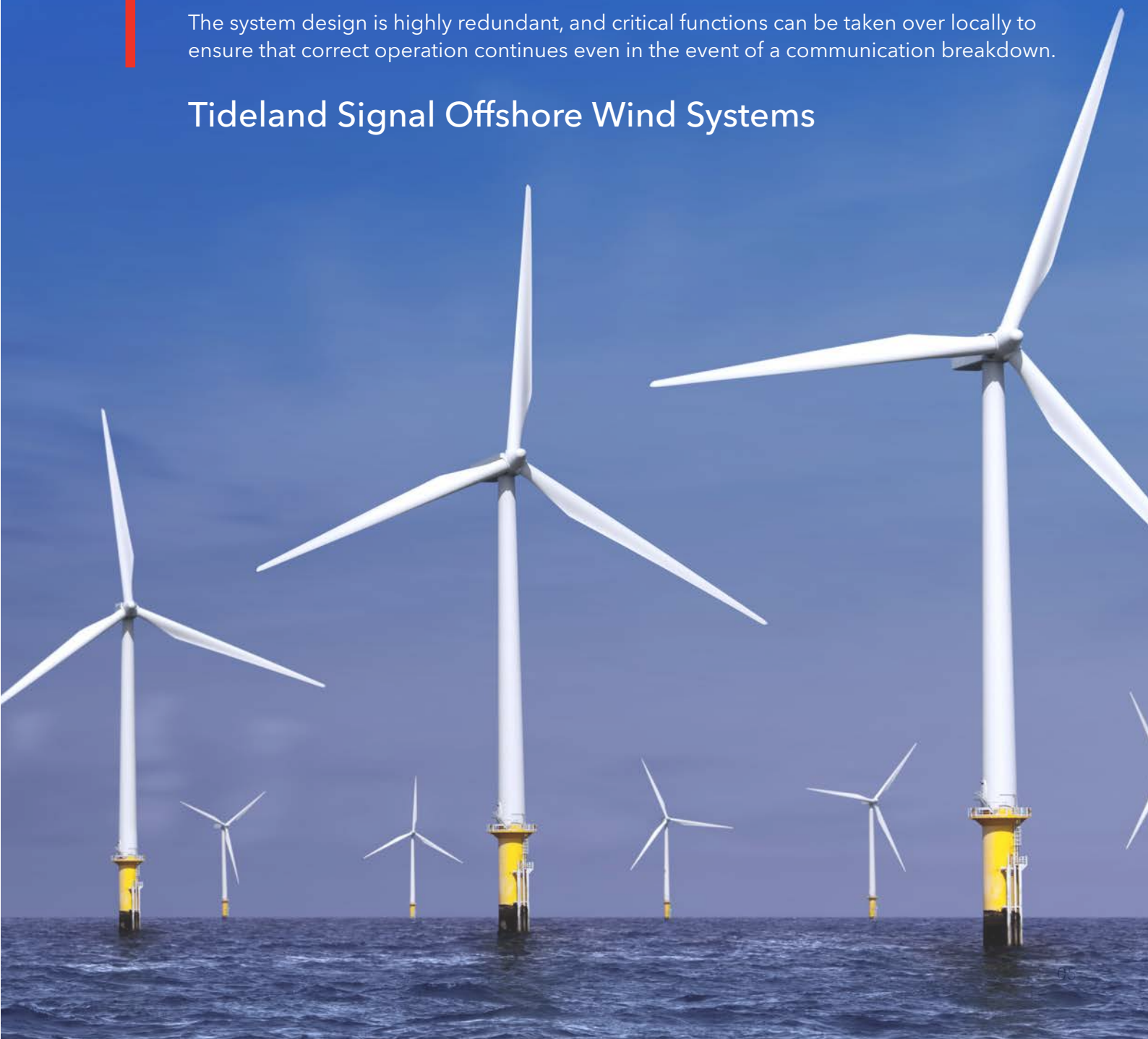
The Tideland Signal Offshore Wind Systems combine the strengths and decades of experience of the IMT, Julius Signal and Tideland Signal brands into a single, comprehensive Navigational Aid (NavAid) solution optimized for the offshore wind energy market.

The best performing components of each product line were selected and tied together by a control system that offers flexibility and total control, either from a local computer or from a remote desktop.

The remote accessibility of the system permits troubleshooting and diagnostics by authorized parties. Work instructions to perform scheduled maintenance can also be uploaded into the system remotely. Thus, the Tideland NavAid system will save you money on maintenance while increasing availability and safety.

The system design is highly redundant, and critical functions can be taken over locally to ensure that correct operation continues even in the event of a communication breakdown.

Tideland Signal Offshore Wind Systems



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1) The tissue in plants that brings water upward from the roots;
2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com

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