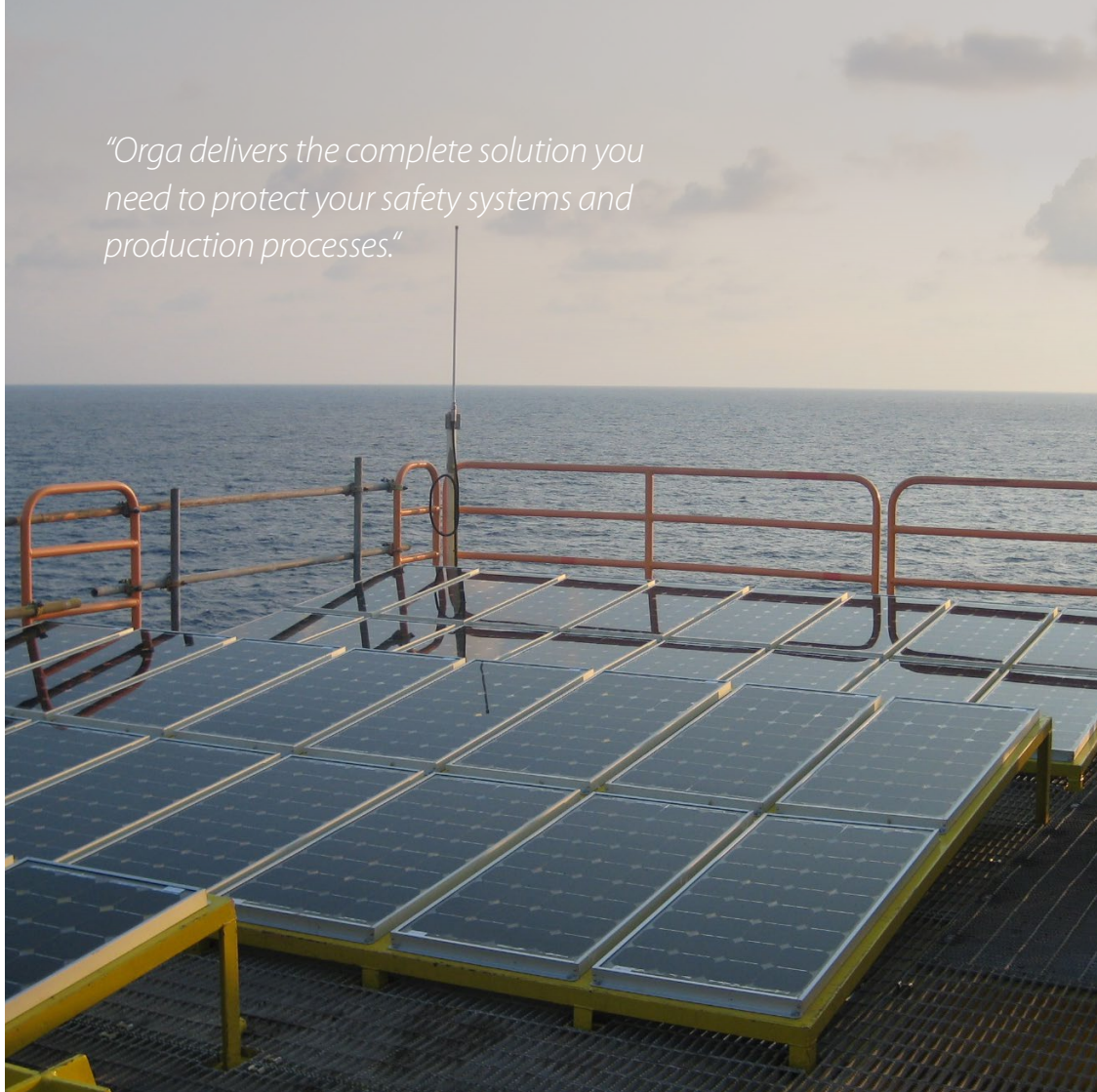

orga
The way ahead in
Remote power solutions
YOUR PARTNER IN EXPLOSION PROOF SOLAR SOLUTIONS

REMOTE POWER SOLUTIONS

When safety matters most, you can trust in Orga.

With over 45 years of experience, Orga delivers high quality and efficient solutions to power critical equipment by solar. Our expertise coupled with our in-house research and development department keeps us at the forefront of emerging technologies. That is why our power equipment is suitable for offshore environments, like hazardous areas.

With our in-depth knowledge of technical calculations, including solar sizing and battery sizing, we are able to provide you with specified power solutions, tailor-made to your project specifications. Besides that, all our remote power products are designed in-line with Ex regulations, which will help you to stay ahead.



REMOTE POWER SOLUTIONS

Reliable solar power to keep your system running.

Running and maintaining a safe operation on remote and unmanned locations is a complex task, especially in hazardous areas. You need a reliable power supply to keep critical systems up and running in all situations. Orga helps make daily operations easier, with Orga's Ex-certified solar power system, an Uninterruptible Power Supply (UPS) powered by solar.

During the daytime the Ex-certified solar regulator (solar charger) powers the load and recharges the batteries at the same time. The batteries continue to supply power when there is low solar radiation during the daytime, and during the night. This ensures that critical systems keep running in order to keep the asset safe and compliant with relevant regulations in every situation, even in hazardous areas.


NORTHSEA BETA
VALLETTA
IMO 9547776
T4
T3
T2

Explosion proof battery enclosure

- **Storage of energy generated by PV module**
- **Suitable for offshore installation**
- **Ex Zone 1,2 certified enclosure**

Orga's battery enclosure is a certified combination of batteries in an Ex-e certified enclosure designed for ventilated indoor as well as outdoor installations. The enclosure provides explosion proof protection for the built-in high quality batteries. It can incorporate different types of batteries such as Nickel Cadmium (Nicad) and Valve Regulated Lead Acid (VRLA) specially designed for solar applications.

The battery enclosure is ventilated naturally while still protecting the batteries from the environment. It has proven itself as a highly reliable combination for the offshore environment. Several sizes are available to fit every type and size of battery.

Explosion proof solar panel

- **High efficiency solar cells to minimise space**
- **Ex Zone 1,2 certified PV module**
- **Suitable for offshore environmental conditions**

The Orga solar panel is designed to survive in hazardous areas and demanding offshore environments. The panel is suitable for areas with gas explosion hazard. Its design protects the solar cells from the detrimental effects of the aggressive environments. It can withstand extreme high wind loads while installed on top of drilling legs or the platform top-side.

The panel consists of the most rugged solar cells on the market (Sunpower Maxeon Technology) embedded in 2x4mm glass, mounted in a high anodized aluminium framework. Optional non-metallic cover to protect the solar panel during installation, commissioning and drilling against dirt and falling objects.

Solar power distribution panel

- **Ex Zone 1,2 certified solar regulator**
- **MPPT or PWM charging techniques**
- **Suitable for indoor and outdoor offshore operation**

The solar regulator assures safe and efficient charging of the batteries. Power from the solar panels is converted by the MPPT (maximum power point tracking) or controlled by the PWM (pulse width modulation) charger to achieve efficient charging of the batteries. The system and cables are protected with circuit breakers and surge protection devices. With voltage/current measurement and earth leakage monitoring the full system is controlled to assure continues power.

The system is available for an output voltage of 12, 24 or 48 VDC, and multiple regulators can be operated in parallel to meet the projects technical requirements. The ability of the MPPT regulator to step-down from a higher voltage solar array to lower voltage batteries maximizes the power generated by the system and is a cost effective design advantage.

REMOTE POWER SOLUTIONS

Keep your asset safe with reliable solar power systems.

Orga's solar power system is built in accordance with the system sizing calculation, based on client requirements and international recognized weather data sources such as NASA. The system combines efficient battery charging and high efficient solar panels into an optimized footprint. In consultation with you, we will design and advise the optimum, complete solution for your application.

Our solar power system consists of solar panels, battery enclosures and a solar regulator panel and is completely explosion proof certified, which makes it suitable for installation in harsh environments. All products can be installed on support frames and have a wide operating temperature range. Due to the high quality materials and technology, we can ensure longevity and low maintenance costs.

Why make business complicated
when the solution is just one call away?

Every system is engineered to fit your needs; with optional provision for other power sources, recharge facilities from an emergency generator and customized distribution boards.

You can also contact us to survey existing power systems, irrespective of whether they were installed by us or by a third party. After carrying out a complete analysis of your installation, our fully certified and experienced team of service engineers will present a clear status report, complete with recommendations and necessary actions.
We provide you with reliable and cost-effective power solutions to simplify for you what might otherwise be a complex working process.

Over 45 years of experience in the offshore industry

Since 1973, Orga has been delivering high quality and efficient solutions for offshore platforms.

For reliable powering of your equipment, call us :
+31 10 208 5555

TOTAL SERVICE
DESIGN, PRODUCTION
AND MAINTENANCE

100% REGULATORY
COMPLIANCE
PROVEN TRACK RECORD

LOW MAINTENANCE
DELIVERS CONSIDERABLE
OPERATIONAL SAVINGS

HIGH RELIABILITY
REMOTE MONITORING OPTIONS
AUTONOMOUS POWER SUPPLY

LOW POWER CONSUMPTION
REDUCED FOOTPRINT REQUIREMENT
HIGH EFFICIENCY

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