



**KW3**



**EXPLOSION PROOF**

The KW3 wind turbine stands out from all other small scale wind turbines due to its unique blade and hinge design which allows it to regulate its rotational speed, maximising output - as the wind gets stronger the blades pitch and cone, protecting the turbine and allowing continual operation during the fiercest of storms.

Kingspan KW3 wind turbine is the result of over 30 years research and development and born from a global installed fleet size in excess of 800 – including the world’s largest rural off-grid fleet in The Falkland Islands through to specialist installations in Asia, Europe, North America, offshore oil platforms and the global telecoms sector.

The KW3EX turbine is based on the KW3, but is optimized for the harsh environment experienced off-shore.

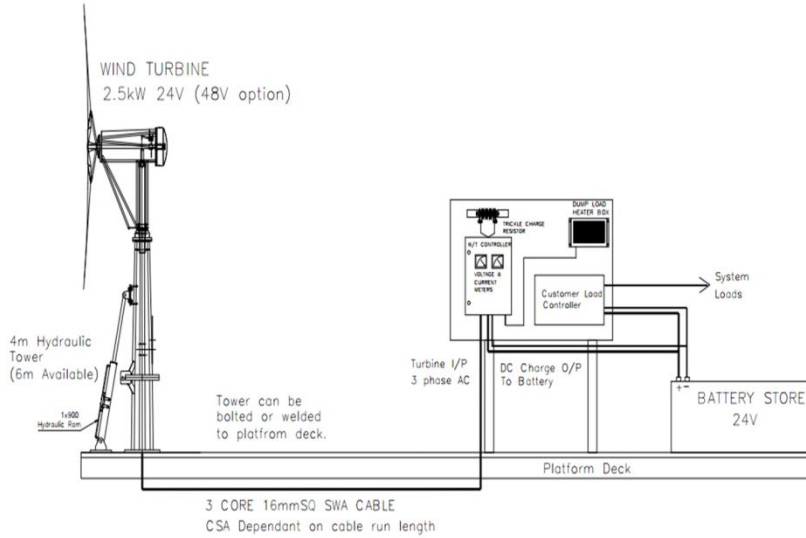
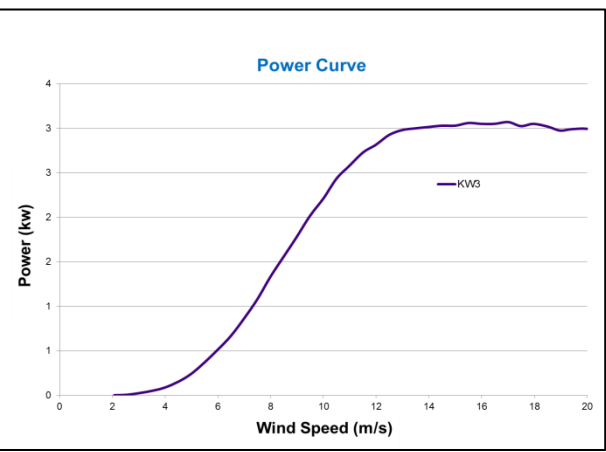
Developed for use in the North Sea, it has been installed for many years on un-manned gas platforms. The unique design works at safe operating temperatures and will not generate sparks, even in environments where there are highly inflammable materials.



The KW3EX is the first EX certified turbine in the world.

SIRA Certification

KW3	Specifications
Peak Power	3.2kW
Reference Annual Energy	4,700kWh at 5m/s
Applications	Telecoms, Rural Domestic, Off-Shore Oil Platforms
Solutions	Grid Tied, Battery Charging, 24V DC, 48V DC - 300V DC
Architecture	Downwind, 3 bladed, Self Regulating
Rotor	3.8m diameter, 300RPM at Rated Power. Thrust 5 kN
Blade material	Glass Thermoplastic Composite / Polypropylene
Generator type	Brushless Direct Drive Permanent Magnet.
<b>Weight</b>	<b>650 kg</b>
Tower Heights	6.5m/11m (Flange Bolted/Taper Fit Monopole - Hydraulic options available)
Foundation Options	Pad/Root/Rock Anchor options
Cut in speed	3m/s <b>(10.8 km/hr)</b>
Cut out speed	None - Continuous operation
Survival Wind Speed	Designed to Class 1 (70m/s) <b>(252 km/hr)</b>
Warranty	5 year standard.



3kW Battery Charging Wind Turbine System Schematics