Tethered Drone Systems Ltd is a SME based in Portsmouth engaged in innovative technology design, build and manufacture. We now need to increase the team size to deliver a commercially viable solution. This role involves a diverse range of design and testing tasks for a talented, flexible and passionate engineer with experience in electronics, and electrical design and development leading to manufacture. This person must embrace the challenge of producing outstanding results on his/her own without the need for constant supervision.

Candidates must be eligible to work in the UK without visa sponsorship.

Responsibilities:

- Design, build and test a power system utilising both AC and DC systems
- Electronic / Electrical system design and integration for an unmanned aerial system
- Development of battery management systems
- Electrical / electronic design, development and build for manufacture;
- Liaise with other engineers to ensure smooth and reliable electronics systems integration;
- Design of test procedures to ensure systems meet the current standards

Skills and Experience

Required:

- Electronics engineering honours degree;
- **Experience with design, development of the power electronics including Switch Mode Power Supply (SMPS) systems, from the first principles to the finished product**
- **Experience with Lithium-Ion batteries**
- **Experience with battery management systems design and implementation**
- Experience with design and implementation of the electronics health check systems
- Experience with microcontroller programming
- Printed circuit board design and layout to minimise EMI

Desirable:

- Experience with Fibre Optic communication protocols and standards;
- Experience with autonomous platform electronics and sensors
- Experience with robotics or unmanned aerial systems
- Experience with high voltage system design

Role Title and Location: Electronics Engineer - Portsmouth

The Opportunity

As the Electronics Engineer you would be involved in all aspects of the Tethered UAS platform development, from the design and development through to production and later mid-life updates.

You may also have responsibility for managing electrical / electronic equipment suppliers for the development of the TUAS platform

This is an excellent opportunity for someone wanting to build on their design experience and to be involved in the next generation of UAS technologies.

Electronics Engineer TDS

What are we looking for?

Educated to degree level or an equivalent qualification having obtained experience of electrical and electronic engineering, including:

- Digital electronics & microprocessor systems
- Power Electronics
- Good understanding of broader engineering disciplines, including:
    - Systems design
    - Power line and or Fibre Optic data transfer systems
    - Safety systems
- Strong interpersonal and well-developed communication skills (written & verbal)
- Willingness to travel within UK when required

The Role

The role is responsible for the electronic architecture and requirements for a tethered unmanned aerial system and typically responsibilities include:

- Defining the optimum electrical architecture for all variants of the TUAS ensuring the electrical architecture and interfaces meet requirements
- Proposing component choice to optimise the design and manufacturing process
- Responsible for the TUAS level power system, including power budget, power profiles and surges
- Responsible for the TUAS electronics and payload health check systems design and implementation
- Hands on electronic systems prototyping
- Acting as main point of contact for all technical issues relating to the electrical / electronic design, development and manufacture for the TUAS
- Responsible for the Telemetry System architecture for the TUAS platform
- Interface with and manage customer expectations throughout the development process
- Responsible for controlling personal workload and identifying any further resource need

What's in it for you?

This role offers a unique career move, as it gives the opportunity to experience the complete view of the design, development and testing process through interaction with other engineers, suppliers and potential clients.

What would you get?

Competitive salary, flexible working, a pension scheme, company share option scheme, superb learning and development opportunities for you and the ability to directly and positively influence the creation of a truly innovative platform.