
About Alén Space

Alén Space is a **New Space** company focused on the development of missions based on Nanosatellites as well as products and services related to them. Our mission is to help our clients to develop their business plan designing, manufacturing and operating satellites in order to execute the application they need.

While Alén Space is a new company, our team has been involved in several complete Nanosatellite missions, from specification to delivery, during the last **11 years**. Alén Space technical team is composed of systems engineers, electronic engineers, AIV engineers, software and operations engineers and project managers; with a large experience on IOD, communication, commercial and scientific missions, with private and public institutions such as the European Space Agency.

Alén Space's value proposition resides in the flexibility and expertise of our **team**. We utilize our design and testing methodologies, which allow the use of components from various suppliers, to create the most suitable platform for the requested mission. During the last 11 years, all our nanosatellites missions have been fully designed in house, following the same multi-provider approach, resulting on a 100% success rate in orbit, for all launched missions.

At Alén Space, **quality** and **flexibility** in the design, manufacturing and testing are hallmarks of the company. The quality of the process is achieved through meticulous testing and verification processes, keeping traceability of all the executed activities. The flexibility is achieved thanks to the proximity relationship with our clients and to our supplier agnostic approach. This relationship aims not only at easing the communication process but also at allowing our commercial clients to take an important role on the design aspects. In this line, we design the most flexible spacecraft platforms, to accommodate subsystem suppliers' changes without heavily impacting the overall mission. Our systems and AIV engineers work closely with the client, in order to take decisions and involve them in the process.

Our team has created what we have termed the **Alén Space Matrix**, a work method that applies the strict quality standards set by the European Space Agency (ESA) and the European Cooperation for Space Standardization (ECSS). All of our management, system engineering and AIV processes are based on those standards.

Quality, Flexibility, Scalability, Proximity, Expertise and Success define all Alén Space values.

Do you want to orbit with us? We offer the opportunity to join a challenging space project together with a self-motivated team with great experience in the design and manufacturing of satellites and with many missions of history!

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Rúa das Pontes 6, of. 203, 36350 Nigrán (Pontevedra)

Job Description

The candidate will be integrated in the Electronics Development Area. This area is in charge of the design of electronic devices and products for the space segment, ground segment as well as support tools (GSE), with a strong focus on radio systems. She or he will be responsible for the design and verification of new RF products (software define radios, amplifiers, etc.) as well as provide technical analysis to assess communication system performance and develop new concepts and architectures.

Position Tasks and Responsibilities

The following tasks will be assigned to the candidate:

- Provide communication theory expertise including assessment of payloads, terminals and ground station systems
- High level design of radio elements: amplifiers, filters, mixers, etc.
- Design of PCBs for RF devices.
- Functional and electrical verification of developed devices.
- Provide technical analysis and simulation to assess communication system performance and to developing the next generation of communication architectures requirements
- Assess the performance of satellite and ground systems and communications links.
- Analysis of radio frequency interference between systems to assure their compatibility.
- Support to systems engineering team regarding identification of new communications concepts and architectures

Candidate qualifications and skills

The candidate must have a Bachelor or Master's degree in Electronics, Telecommunication or equivalent engineering degree.

The **required** experience and skills are:

- The applicant must be fluent in English
- More than 2 years of relevant experience in RF components and PCB design up to 12GHz.
- Strong background in communications and electronics systems.
- Experience in simulation of RF devices.

- Experience in communication system parameters verification (Noise figure, sensitivity, channel selectivity, BER, isolation, mutual interference, phase noise, intermodulation EVM, IP3, OIP3, etc.)
- Proficiency in operation and maintenance of RF instrumentation equipment.

It will be also **desirable** the following qualifications and skills:

- Experience in testing according to quality standards (ECSS desired) and international certifications.
- Knowledge in design of RF components above 12GHz (Ku to Ka band).
- Experience in Electromagnetic compatibility (EMC) testing.
- Theoretical understanding of space communications concepts.
- Knowledge of international radio regulations (ITU).
- Knowledge of antenna design theory.

The applicant must have good communication skills and must be able to work autonomously in an effective manner; while cooperating in a potentially international and culturally diverse team.

Moreover, the applicant must have good analytical, organizational and reporting skills; together with a proactive attitude to solve problems individually and an interest in technology development.

The applicant must be eligible to work and live in the EU.

Conditions

We offer a full time contract.

- ❖ Location: Vigo area (Spain)
- ❖ Starting date: Immediate

If you are a proactive person and want to commit yourself to a present and future project, **we hope to receive your CV** in one of the following URLs:

[English] <https://alen.space/careers/>

[Spanish] <https://alen.space/es/trabaja-con-nosotros/>

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