



Instrument Electro-Mechanical Engineer/Technician

February 2017

Position Description:

Reporting to the Director of Engineering, the electro-mechanical engineer will focus on updating design, component sourcing, ordering, and assembly and test of proprietary instrumentation. The candidate will be comfortable with CAD software, sourcing electronic and mechanical components, redesign of electro-mechanical systems around obsolete parts and familiarity with Gerber files to work with third party manufacturers of custom printed circuit boards and computers.

The incumbent will also create test fixtures to verify components prior to device assembly and monitor, maintain and repair instruments deployed in the field. Additional duties will include maintaining a device build documentation set, creating a component inventory system and some remote technical customer support. Creative problem solving and defect resolution will play an important part of day to day activities.

Successful candidates will have the opportunity to direct and implement future updates, design changes, and improvements to our pathogen detection instrumentation.

The position requires limited domestic over-night travel to customer sites.

Company:

PathSensors manufactures rapid pathogen detection systems utilized in security, agriculture and food safety industries. The company employs CANARY technology exclusively licensed from MIT Lincoln Laboratories. For more information, visit: <http://www.pathensors.com>

Qualifications:

- Electrical engineering and mechanical engineering experience preferred
- High attention to detail
- Comfortable creating or improving system and process documentation (checklists, SOPs, BOMs, etc.)
- Ability to work with CAD system of 3D models and produce updated mechanical, wiring, and PCB design documents
- Good hand-eye dexterity and coordination for precision device assembly
- Highly self-directed, with a 'figure it out' attitude.
- Basic familiarity with Gerber files, ability to communicate with external PCB manufacturers for production runs

Responsibilities:

- Physical build (details are important, hundreds of parts, mechanical and electrical experience) of instrumentation
- Document set updating (CAD system experience with SolidWorks)
- Replacement and redesign of discontinued components (AC/DC power supplies, PMT change-out, blower, document and test)



- Repair, upkeep and onsite PM servicing and field service of customers
- Design and build of component test fixtures/jigs
- Design PCB board test jigs and create test stations
- Remote support calls
- Upkeep & maintenance of rental and field trial systems
- Instrument system redesign for portability
- Technical resource for trouble shooting instrument platform issues
- Implement periodic QC procedures for internal instrumentation
- Packaging for instruments (cardboard, OEM boxes, reduce weight, for Benchtop format)
- Create alternative calibration standards that are time-stable
- Improve instrument design and device 'ruggedness' characteristics
- Create 'MBR' (master batch record) document for instrument shipping
- Create and Maintain internal parts inventory system

PathSensors, Inc. offers a competitive compensation and benefits package, along with career growth opportunities.

Applicants, please submit your résumé and cover letter to HR@pathsensors.com

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