





Product Development & Design

www.palladium-pdd.com

# PROJECT PROFILE

# DETECTION EQUIPMENT PRODUCT DEVELOPMENT

## CLIENT CHALLENGE

Our client develops specialized analytical detection equipment that is sold to governments and agencies around the world for radioisotope detection and identification. The client foresees a demand for a handheld variation of their existing detection product line incorporating similar functionality and portability. This required New Product Development expertise in several stages of the New Product Development Cycle:

- Electrical/Electronics design
- Design for manufacturing
- Knowledgeable sourcing expertise
- Scheduling and Budgetary constraints

#### SOLUTION

Palladium was retained for our expertise in analytical detection equipment and the New Product Development field. The following tasks were performed to successful project completion:

- Electrical/electronics design for battery charging circuit, GPS, power supply, LVDS encoder/decoder redesign, redesign to minimize ESD susceptability
- Validation of PCBs through standards based EMC, EMI, ESD pre-scans and testing

### PROJECT HIGHLIGHTS

Palladium delivered the project within time and budget constraints due to our :

- Previous analytical detection product development experience minimized the development time.
- Knowledgeable COTS sourcing and experience dealing with OEM manufacturers.
- DFMA expertise in the electrical/electronics fields.
- Efficient integration with the client development team
- pilot documentation including drawings, BOMs, and new part entries

Palladium's work enabled the client to:

- Solve troublesome electrical issues prior to production launch
- Mitigate design risks through effective sourcing and OEM collaboration
- Provide a well documented path for product development.

