

Overview:

Optowares has developed a **portable high performance transparent laminate analysis system** with high sensitivity and accuracy..

Innovations:

- Measures, identifies, and quantitates layers within transparent laminate such as transparent armor with **100% layer material identification** and **thickness resolution of <0.01 mm**.
- **Stand-alone portable** package with proprietary hardware and software.
- Allows accurate measurement **up to 6" thick transparent laminates**.
- Conducts rapid measurement and analysis on the unit without need for data offloading and analysis.
- Extendable for the measurement of structural and chemical degradation of transparent structure depending on operational needs.



Benefits:

- Tested and validated at a DoD facility for its operation and accuracy.
- Accurate qualification of transparent structures
- Simple operation with graphical user interface
- Measurement available in both simple output (layer identification and corresponding thickness) and detailed data (spectral information throughout the structure)

Current Status:

We have delivered a beta prototype to US military. Our system was developed for a specific set of materials and analysis. It can be customized for other applications by training the machine learning algorithm for a particular set of materials and operating conditions.

Optowares:

Founded in 2016, Optowares has been developing innovative diagnostic systems for in-situ on-field characterization of materials (coatings, epoxies, thin films, and thick transparent armors).