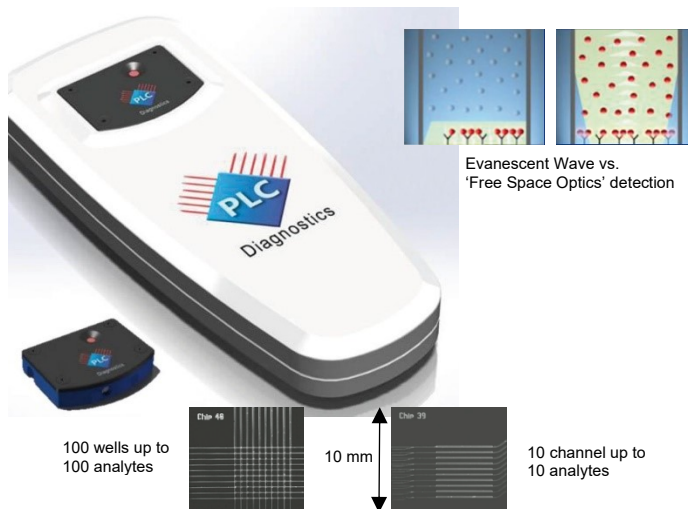


MEMS Solution for PLC Diagnostics

The next generation handheld / Point of care diagnostic platform



Application

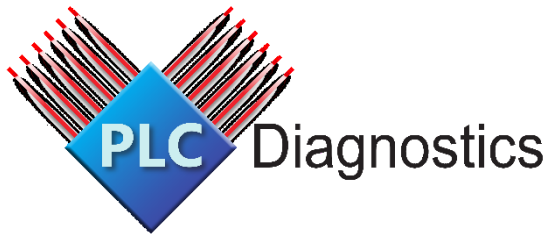
PLC Diagnostics Inc. has developed the next generation, rapid diagnostics testing platform for sensitive, robust, inexpensive and simple detection of protein and molecular biomarkers.

This new platform is based on novel microarray chip technology. By replacing the expensive laser scanners and utilization of an array with a monolithic integrated intersection grid of 100 μm wide planar optical waveguides.

This technology enables real-time quantification of molecular complex formation on the microarray surface. With no wash or reagent addition steps, assay complexity and cost are significantly reduced, making PLC Diagnostics platform a perfect solution for Point-of-Care (POC) diagnostics.

Product specifications

- Built-in multiplexing, 10 or 100 well design
- Uses standard semiconductor fabrication
- Currently 10mm X 10mm \rightarrow 2mm X 2mm
- Small, simple, inexpensive and robust
- Optical channels (waveguides) on Silicon
- Light propagates within the chip
- Simple optics, no lenses no mirrors
- Inherently sensitive (propagating evanescent Wave)



PLC Diagnostics

The current Point-of-Care (POC) diagnostics market totals \$5B worldwide and is growing rapidly. Expansion of this market is currently limited by the inability of current POC tests and instruments to provide the same quality of results as those obtained from centralized labs. Also the majority of the existing POC technologies are incompatible with multiplexing.

PLC Diagnostics is finalizing the development of a revolutionary detection platform based on the innovative and proprietary technology ('FENT'). FENT has exquisite sensitivity, offers inherent multiplexing, has 5-15 minutes turnaround time, can run proteins and nucleic acids, is easy to use, compact, portable and inexpensive.

With these attributes FENT will become the technology of choice for POC diagnostics.

Read more on <https://mems.lionix-international.com>

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LioniX International

LioniX International is a leading global provider of customized microsystem solutions in scalable production volumes.

We provide customized solutions for OEM's and System Integrators, from design to fully assembled modules, by vertical integration and in scalable production volumes. We maintain our technology leadership secured by a strong IP position.

LioniX International core competences are in Photonic Integrated Circuits (PIC), customized MEMS, and opto-fluidics.

Our chips drive your business

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