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cobas®  
Lab in a tube



## Volpi powers lean manufacturing of Rapid Coronavirus, Flu Test

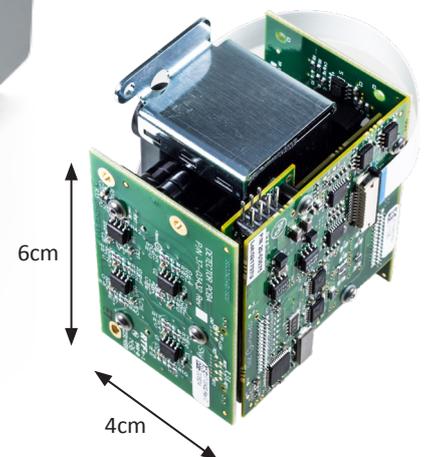
### CASE STUDY

Client:  
Cobas Liat

Website:  
[www.cobasliat.com](http://www.cobasliat.com)

Industry:  
Point-of-Care

Solution/Application:  
Molecular Diagnostics



### Overview

Our client came to Volpi to provide crucial optoelectronic technology for its cobas® Liat System, a fast, easy-to-use, compact PCR system designed for on-demand testing in point-of-care settings such as physician clinics, pharmacy, and hospital and satellite laboratories.

The objectives of the instrument, and therefore Volpi's goal in contributing its component, included:

- Generating results for single samples within 20 minutes in either point-of-care or clinical lab setting
- The ability to simultaneously detect and differentiate SARS-CoV-2, influenza A and influenza B in healthcare-provider collected nasopharyngeal and nasal swabs or nasal swabs self-collected in a healthcare setting



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## Approach

Volpi's task was to transfer an existing design to one that could be manufactured effectively and efficiently at scale. In the beginning, we encountered some issues, as we often do, because the proposed design was not really suitable for manufacturing. Volpi identified the design changes necessary to make manufacturing at the scale, speed and cost needed, feasible. Additionally, Volpi developed the production tester, identifying the critical system parameters to ensure the built modules performed according as both defined and manufactured. The result was an efficient, lean and reliable manufacturing process producing 10,000 units annually.

## Results

Volpi design engineered and manufactured, at a large scale, a photometer that met the client's key performance objectives through:

- Optical module industrialization, including implementation of traceability for key components & tester development
- A highly integrated design
- Six channels for excitation and detection
- A quick ramp-up and Lean Manufacturing, in order to produce modules at a high capacity at the highest possible quality



*Volpi is a preferred supplier with regard to optoelectronic modules and provides these modules for some of our key instrument solutions in the core laboratory and at the POC. For more than a decade, I have known the Volpi team as dedicated to making challenging things happen and to do what it takes to supply high quality products reliably, even at times of strong demand fluctuations.*

Multi-national Instrument Manufacturer

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