

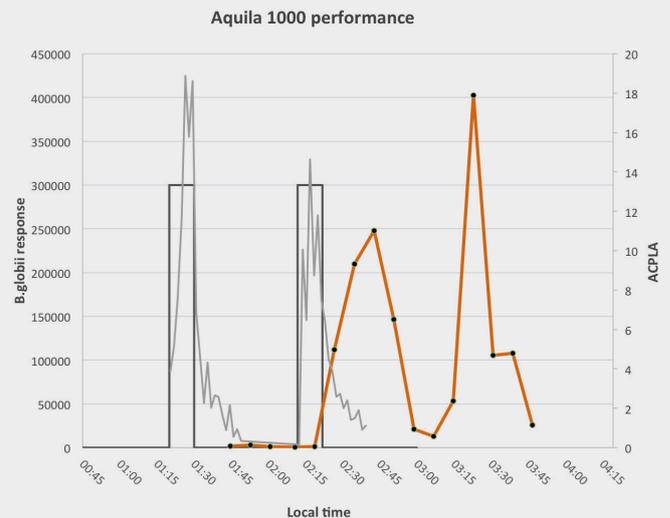
AQUILA 1000

REAL-LIFE PERFORMANCE IN PRAGUE METRO TRIAL

The Q-linea Aquila 1000 demonstrator provides random access DNA and protein-based pathogen identification capabilities in a fully automated system offering a 100+ sample analysis capacity per 24 hour operating cycle.

- Bio Identification of airborne agents in 1 hour
- Fully automated 24/7 operation, 100+ random access samples/day
- Can be adapted to analysis of bacteria, viruses and spores in same sample
- Sensitivity < 10 ACPLA
- Successfully demonstrated in the Prague Metro in 2013
- Based on a proprietary molecular platform

During the trials performed in the Prague Muzeum metro station in October 2013, the Aquila system was challenged with low amounts of disseminated spores in a very difficult background situation.



The full-scale trials were performed within the EU FP7 project TWOBias during five nights in October 2013. During the example experiment presented in the graph to the upper right, two metro lines were running at high-traffic schedule. Two dispersions of *B. globii* spores were performed (dark grey). Monitoring started 30 minutes before first dispersion, and continued for 150 min. Reference measurements were made by time-resolved biological sampling (light grey, results available 24-48 hours after the test). Aquila 1000 response in orange. Each dispersion was unequivocally identified in a time-resolved manner in less than 70 min after dispersion start. Comparable performance was achieved for six further dispersions during the trial week.

The Q-linea Aquila 1000 Bio Identification demonstrator offers fully automated, 24/7, random access monitoring of bio threat agents in air. The Aquila platform is currently configured for spore detection, but can be adapted for

identification of bacteria, viruses and toxins in the same sample with state-of-the-art sensitivity.

The technology platform has to date been evaluated by the Swedish and French defense ministries and is currently developed further within the European Defence Agency project IPODS.

