

The full spectrum

Analytik Jena is taking its qTOWER iris to the market – packaging all of Analytik Jena’s qPCR experience into one instrument series. The device provides clear signals from UV-A to near-infrared (NIR), allows multiplexing for up to six targets at the same time, provides users with the freedom to choose their modules, consumables, reagents, and assays, and is ergonomic and whisper-quiet.

The real-time PCR thermal cycler qTOWER iris combines all of Analytik Jena’s qPCR experience into one device. It is capable of everything that qPCR can achieve – and in an uncompromisingly open system.

“We tested the qTOWER iris in our lab. The device is easy to use, fast, the multiplexing works great, the curves are beautiful. And the print report is the icing on the cake. A bonus is the gain settings to enhance the signal depending on the dye. This saves us money in assay development, as well as the freedom to choose the plastic. Iris makes our work easier in every respect – and it’s super quiet too.”

Maja Studencka-Turski, Scientific Lead, myPOLLS Biotec, Konstanz

For clear signals and ease of use

Multiplexing: qTOWERiris can process up to six targets in one go and provides clear signals across the entire spectrum – from near infrared (NIR) through to UV-A.

Free choice: Color modules are available individually and dyes can be freely selected along with the consumables. The factory-calibrated device does not need to be recalibrated for new dyes. For weaker probes, the signal can, if necessary, be amplified selectively using the gain setting in the software.

Easy to use: qTOWERiris performs a self-test; the fiber optics can be checked before each run. In terms of ergonomics: the qTOWERiris mechanics are robust, its elegance is unparalleled, and the whisper-quiet system provides for a quiet lab.

Faster research without edge effects

Precision in every well: When heating and cooling, the target temperature is controlled precisely and without overshooting or undershooting, thus preventing any false amplifications (artifacts). There are also no edge effects: Thanks to the homogeneous temperature distribution across the entire 96 block, its deviation is limited to ± 0.15 degrees Celsius, as compared with the market-standard ± 0.4 degrees Celsius. This also applies to the readout results: Since the fiber optic technology advances column by column, unlike camera optics, it is able to read each well from the same angle.

The fast track to a complete assay: Using the Linear Gradient Tool, different temperatures can be tested column by column in the same run – with twelve temperature ranges for the 96 block (24 for the 384 block).

The gradient function covers a range of up to 40°C (96 block) or 24°C (384 block), which can be adjusted gradually by at least 0.1°C.

Software

The license-free software has been completely overhauled. It supports common analysis methods (Quantification, Gene Expression, Genotyping, Multi-gene/Multi-plate Analysis, Endpoint and Melting Curve Analysis) with a clear overview, secure data transparency (anonymized sample layout, MIQE-compliant sample documentation), and a customizable PDF print report.

About Analytik Jena GmbH+Co. KG

Analytik Jena is a leading global supplier of analytical measurement technology in the field of molecular biology as well as liquid handling and automation technology. Whether in the fields of chemistry, pharmaceuticals, medicine and life science, food safety, agriculture or environmental analysis - Analytik Jena offers standard-compliant applications for routine analysis as well as for special tasks. Precision, reliability, easy handling and comprehensive service are the top priorities in the development of laboratory analysis products. Analytik Jena is part of the Swiss Endress+Hauser Group.