

Axion Maestro Z

Real-time, label-free, impedance-based live-cell analysis platform for continuous monitoring of cell proliferation, viability, and function.

https://www.axionbiosystems.com/

Overview

The Axion Maestro Z is a comprehensive live-cell analysis platform that utilizes impedance-based technology to provide real-time, continuous, and label-free monitoring of cells in a 96-well or 384-well (Maestro ZHT) format. It is designed to capture the full kinetics of cellular events—such as proliferation, viability, morphology, immune cell-mediated killing, and barrier function (TEER)—which are often missed by traditional endpoint assays. The core of the system is the AxIS Z™ software, which offers an intuitive, user-friendly interface for experiment setup, execution, and data analysis. The platform features a built-in, smart environmental chamber that precisely controls temperature and CO₂, eliminating the need for an external cell culture incubator. The software is available in three modules: the standard Impedance Software Module, the GxP Impedance Software Module for FDA 21 CFR Part 11 compliance in GMP/GLP labs (including user permissions, audit trails, and digital signatures), and the Impedance Automation Module which provides an API for integration with robotic liquid handling systems. The Maestro Z App allows users to monitor experiments remotely from a smartphone. The system is an indispensable tool for academic, biotechnology, and pharmaceutical labs worldwide, accelerating research in areas like oncology, virology, and cardiology.

Key Features

- Real-time, label-free impedance monitoring
- Continuous kinetic data acquisition
- AxIS Z intuitive analysis software
- GxP Impedance Module (FDA 21 CFR Part 11 compliance)
- Integrated environmental controls (CO₂/Temp)

- Mobile app for remote monitoring (Maestro Z App)
- Automation API for liquid handlers
- Barcode plate tracking and event logging

Pricing

Model: one time

The Maestro Z is a high-cost laboratory instrument with a one-time purchase model for the hardware and core AxIS Z software. Optional software modules (GxP and Automation) are available for additional cost. Pricing is not publicly disclosed and requires a quote. Recurring costs include proprietary CytoView-Z™ plates.

Target Company Size: medium, enterprise

Integrations

Axion Omni™ Live-Cell Imager, Robotic Liquid Handling Systems

Compliance & Certifications

FDA 21 CFR Part 11

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