

Medical Market Insight

OCTOBER 2021

Advanced Energy has a proven track record of developing and providing high precision, high voltage DC-DC and compact, high efficiency AC-DC power solutions for a wide range of Life Science applications including:

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- IVD, RNA/DNA analyzers
 - Mass Spectrometers
 - SEM
 - Genomics
 - Electrophoresis
 - Electroporation

Market leading products, coupled with unrivalled applications experience, engineering know-how, and regulatory expertise uniquely positions Advanced Energy as the ideal complete power partner to Life Science Equipment OEMs.

The life science instrumentation market covers many analytical technologies used in biochemical analysis, genome studies, chemical analysis, and several other research studies. Technologies such as spectroscopy, chromatography, and electrophoresis are used for the separation of various chemical and biochemical mixtures. The emergence of advanced analytical instruments, such as DNA sequencers, real-time PCR instruments, and flow cytometers, has further enhanced laboratory research and development.

Although COVID-19 impacted the life science instrumentation market in 2020, the negative effect was much lower compared to other medical sectors (elective surgery, imaging etc.). While the focus in 2020 was on testing with instruments that were already available, there is now an increased emphasis on R&D into new equipment capable of, handling more samples, offering a wide range of tests, and delivering faster results. As a result, the market is expected to see 6% growth from 2021 onwards. Growth will be largely driven by the:

- Increasing investments in pharmaceutical R&D and public-private investment in life science research
- Rising incidence of target infectious diseases and genetic disorders
- Expansion of geriatric populations and the corresponding increase in age-related conditions
- Spread of decentralized treatment centers, bringing point-of-care closer to the patient
- Mounting food safety concerns
- Advancements in NGS platforms
- Shrinking costs of genome sequencing
- Adoption of capillary electrophoresis with mass spectroscopy

These macro trends demonstrate the demand for innovation, including need for more portable/mobile equipment, faster analysis with greater accuracy, implementation of new technologies, as well as regulatory compliance challenges.