U.S. Laparoscopic Device Market to Approach $6B by 2031 as Robotics, and AI Shape Next-Gen MIS – iData Research

U.S. laparoscopic device market to hit $5.9B by 2031, driven by robotic surgery growth, AI towers, and smoke-free tech boosting safety and precision.

VANCOUVER, BRITISH COLUMBIA, CANADA, August 13, 2025 /EINPresswire.com/ -- The latest U.S. Laparoscopic Device Market report from iData Research reveals that the market, valued at over $4.9 billion in 2024, is projected to reach nearly $5.9 billion by 2031, driven by the expansion of robotic-assisted laparoscopy, AI-integrated visualization towers, and evolving safety protocols in minimally invasive procedures.

> Laparoscopy continues to offer broad clinical and operational value, especially as hospitals invest in technologies that enhance precision, visibility, and procedural efficiency.”
> *Dr. Kamran Zamanian, CEO of iData Research*

Visit idataresearch.com/subscription-model to learn how iData’s unprecedented Subscription Model designed for SMBs helps growing companies unlock cost-effective access to global market data across key surgical segments.

While traditional laparoscopy remains a gold standard in general, gynecological, and urological surgeries, rapid growth in robotic-assisted techniques is reshaping procedure volumes and procurement strategies. AI-enhanced laparoscopic towers and advanced insufflation systems, such as dual-tube smoke evacuation, are also gaining adoption in response to regulatory pressures and surgical complexity.

“Laparoscopy continues to offer broad clinical and operational value, especially as hospitals invest in technologies that enhance precision, visibility, and procedural efficiency” said Dr. Kamran Zamanian, CEO of iData Research. “As robotic systems, advanced imaging towers, and safety-focused tools become more accessible, facilities of all sizes are modernizing their MIS programs to meet rising expectations around recovery times, outcomes, and surgical consistency.”

Hospitals Accelerate Laparoscopic Upgrades as Market Nears $6B
With laparoscopic procedures offering reduced recovery times, shorter hospital stays, and fewer

complications, their adoption continues to grow. Despite this robotic expansion, laparoscopy remains a critical standard, especially in facilities not yet equipped for full robotic integration.

Emerging technologies such as Olympus's ENDOEYE FLEX 3D and Stryker's SPY-PHI® are improving visualization and tissue analysis, while AI-driven towers like VISERA ELITE III™ are helping standardize complex cases. These systems support institutions navigating high surgical volumes and training variability, especially in teaching hospitals and ASCs.

The U.S. Laparoscopic Device Market, worth $4.9B in 2024, is projected to reach nearly $5.9B by 2031. Although robotic platforms continue to attract investment, traditional laparoscopy benefits from lower capital costs and growing adoption of hybrid workflows.

Key Insights from the Report:
- Robotic-Assisted Laparoscopy Expands: Procedure volumes using da Vinci Surgical Systems grew 17% from 2022 to 2024. Mid-sized hospitals and ASCs are adopting new robotic systems with hybrid capabilities.
- Advanced Imaging & AI Visualization: AI-enhanced towers are entering U.S. operating rooms, offering features like automated white balancing and real-time anatomical recognition to support consistent clinical outcomes.
- Smoke Evacuation Compliance: States are enforcing smoke evacuation mandates. Dual-lumen insufflation platforms like AirSeal® and PneumoClear™ are increasingly standard in gynecologic and colorectal suites.
- Disposable Preference Prevails: Despite higher cost over time, disposable devices remain favored due to sterility concerns. Companies like Medtronic, Ethicon, and Applied Medical continue to dominate the access device space.
- Value-Added Services Create Edge: Tools like Valleylab™ Exchange Service support remote software updates, increasing product functionality and improving post-sale value.

Who Should Read This Report?
This report is designed for marketing managers, CEOs, CFOs, and strategic decision-makers within the minimally invasive surgery and laparoscopic device space who seek data-driven insights to guide investments, product planning, and competitive strategy in a $5.9B market shaped by robotic adoption, AI-enhanced tools, and procedural growth.

Explore the Market Report
Produced by https://idataresearch.com/, a leading medical device market intelligence firm, this report includes:
- Procedural data across multiple laparoscopic specialties
- Competitive analysis of major device categories and suppliers
- Adoption forecasts for robotic-assisted and AI-integrated solutions
- Insights into smoke evacuation mandates and disposable device trends

Access a sample of the 2025 U.S. Laparoscopic Device Market Report at https://idataresearch.com/product/laparoscopic-devices-market-united-states/ to learn more and see detailed insights into market drivers, growth projections, and strategic opportunities.

About iData Research
https://idataresearch.com/ has been a leader in market intelligence for the medical device industry for over 20 years, delivering data-driven insights that help companies mitigate market risks, optimize pricing strategies, and uncover new revenue opportunities.

Learn more at https://idataresearch.com/

Maksym Brylkov
iData Research
+1 604-266-6933
email us here
Visit us on social media:
LinkedIn
Facebook
YouTube
