Da Vinci Xi® Features

Platform® mobility and setup	• Total OR space footprint 2.60 m2 for all 3 components • All components easily movable with wheels and a motor-driven patient cart • Components fit through a standard size door (<100 cm). • Single-cable connection interface connects all three components. • Voice guided patient cart set-up.
Surgical site access	• 8 mm – 12 mm multi-port
Instrument availability	• 8 mm fully wristed: 32 • 12 mm fully wristed: 1 • No assembly required for all wristed instruments
Advanced instrumentation	• Fully wristed vessel sealer & stapler • Non-wristed ultrasonic shears
Instrument controls	• Instrument controllers replicate natural hand movements by maintaining eye-hand-instrument tip alignment vs. counter-intuitive controls. • Automatic tremor filtration and multiple motion scaling options • Footswitch panel provides immediate access to all instrument controls including monopolar, bipolar, advanced energy and advanced instrument functionality. • Immediate access to camera controls and additional instrument arm engagement from footswitch panel • Instrument controllers capable of applying both force and torque feedback when high force on the arms or instruments are encountered • Second console instrument controllers can become 3D pointers for teaching.
Range of motion	• Slender arm design enables close port proximity (up to 6 cm distance). • All wristed instruments provide 7 degrees of freedom and 540° rotation, extending instrument control beyond the limits of the human hand. • Haptic cues provided at range of motion limits for all active joints • Automated pivot point on all arms minimizes movement at patient body wall.
Vision	• 3DHD optics viewable in an immersive 3DHD display, no glasses required • 10x optical magnification with additional 4x digital zoom capability • Telestration capabilities on Vision Cart Touchscreen provide improved communication and teaching for non-sterile OR staff, residents and fellows.
Advanced imaging	• Near-infrared fluorescence imaging provides real-time visualization of vessels, bile ducts and tissue perfusion (standard equipment) • Only available 3DHD fluorescence imaging robotic endoscope
Advanced OR & system integration	• Second surgeon console integration provides opportunities for resident and fellow training or second surgeon operative assistance. • Multi-window surgeon console display provides viewing of external video sources in parallel to endoscopic view. • 2D and 3D high definition video outputs for external OR monitor integration • 3rd party electrosurgical unit integration provides safety controls to disable unintentional activation of electrocautery. • Two-way audio linked to all components for improved OR staff communication • Table motion integrated with the patient cart for intra-operative table movement without removing instruments from the robotic arm
Ergonomics	• Ergonomically adjustable console saves preferences under unique user profiles. • Fingertip controls enable instrument disengagement for ergonomic hand, arm and shoulder repositioning.
System control preferences	• Touch pad interface at surgeon console provides control of audio, video, display, instrument and system control settings. • Surgeon preferences saved under unique user profiles for automatic recall • Touchscreen monitor on vision cart provides OR staff real-time surgical information and access to system controls, audio, video settings, instrument information and troubleshooting support.

Da Vinci Xi® Features

Safety	• Automatic cannula detection locks surgical cart in position during surgery. • Over 1,300 continual system safety checks per second detect potential system faults. • Stereo viewer sensors lock instrument controls when operator's head is out of the viewing console. • Automatic system fault notifications • Unintended instrument-movement fault notifications • Guided instrument exchanges ensure instruments are returned to their intended position in the surgical field. • Stapler tissue-thickness sensing provides information on appropriate tissue thickness relative to reload type.
System reliability	• Average annual 98% uptime, based on 24 hours per day
Remote system monitoring	• Proactive repair monitoring • Intraoperative troubleshooting
Customer service	• Possibility to benefit from 24/7/365 technical support
Part repair/replacement	• Possibility for critical part (endoscope) replacement within 1 business day
Account support	• Over 175 worldwide field engineers (over 25 dedicated to Europe) • Dedicated sterilization and reprocessing support team • Clinical support representative every 3-5 systems
da Vinci System & Procedures Supported	• 5,000+ systems worldwide • More than 6 million procedures
Indications (please refer to the intended use below)	• Gynecology, Urology, General Surgery, Thoracic, Cardiac, TORS (Trans-oral otolaryngology surgical procedures)
Training	• 5 dedicated European training centers • 200+ Technology Training and Surgeon Led Training Programs • In person peer-to-peer training (proctoring) • Over 35 skills simulation modules using surgeon console controls
Education	• Fellowship training • Research grant support • Online training
da Vinci System Publications	• 15000+ peer reviewed publications
Program development	• Dedicated OR efficiency program support team for new and existing accounts • Program benchmarking vs. similar da Vinci® programs • Procedure economics optimization
Sterilization validation and verification	• All instruments go through sterilization and clinical use testing to ensure high fidelity movement throughout the instrument life.

The Intuitive Surgical Endoscopic Instrument Control System (da Vinci Xi® Surgical System) is intended to assist in the accurate control of Intuitive Surgical Endoscopic Instruments during urologic surgical procedures, general laparoscopic surgical procedures, gynecologic laparoscopic surgical procedures, general thoracoscopic surgical procedures, thoracoscopically-assisted cardiotomy procedures, and trans-oral otolaryngology surgical procedures restricted to benign tumors and malignant tumors classified as T1 and T2, and for benign base of tongue resection procedures. The system can also be employed with adjunctive mediastinotomy to perform coronary anastomosis during cardiac revascularization. The system is indicated for adult and pediatric use (except for trans-oral otolaryngology surgical procedures). It is intended to be used by trained physicians in an operating room environment. The da Vinci Xi Surgical System is a class IIb medical device CE marked (CE0543) under the European Medical Devices Directive (93/42/EEC) manufactured by Intuitive Surgical, Inc. Refer to Instructions For Use before use.

PN 1024863-EU Rev C 05/2019