

## KROTON EXPERT — TECHNICAL DATA

Kroton Expert trainer is a product uniquely placed on the market. The set includes the laparoscopic camera with optics, allowing an operator and a cameraperson to perform laparoscopic surgery simulation in conditions similar to an operating room environment. The set comes with the largest market offer, and includes seventeen laparoscopic training modules. Training modules have been prepared to guide trainees and facilitate a transfer of comprehensive laparoscopic skills, so that they can enhance their hand-eye coordination first, and then practice standard medical surgeries. The trainer is mounted on our ergonomic workstation. The station is mobile. There is an additional drawer placed under the trainer allowing for the storage of training modules.

### **Component Elements of the Trainer:**

- The trainer device shaped to mirror operating room conditions, equipped with 15 ports.
- **External instructional Full HD laparoscopic camera** (1920×1080 pixels).
- 17 training modules, a stand for an organic training module.
- Software allowing to measure time, save a recorded training session, display an image registered by the trainer on a computer connected to the same LAN network.
- Training workstation with the display monitor.
- LED lighting.



Name	Kroton Expert Laparoscopic Trainer
Dimensions of the Trainer with the Trolley	172 x 61 x 80 cm
Trainer's External Dimensions	42 x 43 x 26.5 cm
Workstation Description	The trainer is an independent workstation equipped with locking castors. There is a drawer mounted under the trainer for the storage of training modules. Height of the trainer's table is adjustable. The trainer's table is fitted with holders for laparoscopic tools.
Number of Holes for the Trainer's Tooling	15 holes helping to position the tools in a way facilitating the practice of majority laparoscopic procedures.
Laparoscopic Camera	Instructional laparoscopic camera allows to develop good habits and enhance cooperation between an operator and a cameraperson.
Laparoscopic Camera Holder	The trainer is equipped with the laparoscopic camera holder used to train one person.
Laparoscopic Camera's Parameters	The trainer is fitted with the instructional laparoscopic camera with laparoscopic optical elements. Our camera has Full HD resolution of 1920 x 1080 pixels. The camera's quality is comparable to an authentic laparoscopic camera.
Display Monitor	24"
Monitor Holder	The display holder allows for the adjustment of the display monitor.
Laparoscopic Tools	The set includes genuine, reusable laparoscopic tools. <ul style="list-style-type: none"> <li>1. Grasper</li> <li>2. Needle holder</li> <li>3. Dissector</li> <li>4. Scissors*</li> </ul>
Laparoscopic Training Modules	The set includes 17 training modules:

	<ol style="list-style-type: none"> <li>1. Beads 1</li> <li>2. Beads 2</li> <li>3. Pipe Cleaner</li> <li>4. Numbers</li> <li>5. Puzzle</li> <li>6. Hanoi Towers</li> <li>7. Sorter</li> <li>8. Bead Maze</li> <li>9. Anastomosis</li> <li>10. Myomectomy — Lodge replacement element</li> <li>11. Wound for Suturing</li> <li>12. Skin for Cutting &amp; Suturing</li> <li>13. Suture Pad</li> <li>14. Surgical Cutting</li> <li>15. Vascular Ligature</li> <li>16. Small Intestine</li> <li>17. Dissection &amp; Clipping</li> </ol>
Software	<p>Software Functions:</p> <ul style="list-style-type: none"> <li>- Training time measurement</li> <li>- Training session recording</li> <li>- Assigning the session to a trainee</li> </ul>
Trainer Operation within LAN Network	<p>The concept consists in the connection of several trainers to an instructor's workstation with a computer linked to the LAN network.</p> <p>The instructor views images sent from trainers on his monitor, and can give training suggestions by pointing his cursor on the screens of the trainers.</p>
Lighting	LED
Power Supply	230V