



by **HUMAN  
XTENSIONS™**  
Interactive Brochure

Combining the advantages of robotics with the benefits of affordable handheld instruments.  
Delivering mobility, ergonomics, and broad adaption ability in a handshake.



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## PUTTING THE PATIENTS BACK IN YOUR HANDS

Human Xtensions is catalyzing a new medical reality, by delivering disruptive digital handtop innovation that pushes the art of surgery into new frontiers. By combining the advantages of robotics with the benefits of affordable handheld instruments, our operating systems are creating a new category in the medical device arena. We strive for smaller, simpler, and smarter. Human Xtensions handheld surgical solutions put anatomic access at your fingertips, and at your patient's bedside. Human Xtensions is making minimally invasive surgery (MIS) a smart art.

We call this **ARTEFFICIENT SURGERY**



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## The **HANDX™**

### YOUR HANDHELD SOLUTION

Robust yet compact and lightweight, HandX™ is an electromechanical, controlled laparoscopic device that merges man and machine, for advanced 8 degrees of freedom (DOF) MIS.

HandX™ empowers the surgeon's freedom, flexibility, proximity, control and range.

- FDA-cleared
- CE marked
- A handheld surgical solution that combines the dexterity of robotic surgery with the benefits of an ergonomic modular handheld platform
- Potentially broadens the surgeon's MIS practice, by ensuring free and natural maneuverability, at the patient's bedside
- Streamlines the surgeon's natural hand motions into fluid movements inside the patient's anatomy
- Easy to use, powerful tool that is lightweight and natural



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## AFFORDABLE

### SIMPLIFIED, MODULAR, COSTEFFECTIVE

HandX™ combines the advantages of robotics with the benefits of advanced handheld innovation for medical centers of any size and scope.

- Suitable for any surgical environment
- Modular technology platform
- No set-up time
- No workflow disruption
- No maintenance
- Flexible economic model
- As little as 1 instrument per procedure

- Short learning curve, designed to match and empower surgical teams of any skill level in any OR
- Small OR footprint
- Enabler for converting open surgery to MIS
- High mobility and enabler for fast procedure turnover



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## OPTIMAL FIT

- Ergonomic comfort
- Robust digital capacity in a lightweight handheld device
- Accommodates various hand sizes
- Ambidextrous
- Natural grip



### KEEPING FLEXIBILITY AT HAND

HandX™ easily adjusts to comfortably fit the grip of the surgeon's hand, it simply extends the human hand into the targeted areas, used with ease and free mobility.



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# ARTEFFICIENT OPERATING SYSTEM

- Compatible with regular 5mm trocars
- Interfaces with rigid and flexible instruments
- Supports multiple end-effectors
- Offers 8 DOF (4 motorized, 4 manual) laparoscopic tools
- Makes procedure plan less sensitive to trocar position
- Allows easy instrument replacement during surgery

## MODULAR AND FLEXIBLE SYSTEM

HandX™ facilitates complex MIS maneuvering, allowing efficient articulation, and smooth access into technically challenging areas.



**HANDX™ EASY**



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## PERSONALIZATION - EASE OF CONTROL



### DIRECT EXPERIENCE, VIRTUOUSIC ARTICULATION, TAILORED TO THE SURGEON AND PROCEDURE

By scaling the surgeon's motions and forces, HandX™ is agile and only requires the surgeon's natural hand movements for full control.

- Enables complex procedures
- The articulation of the device allows flexible tissue access
- Jaw movements mimic natural finger gestures
- Up to 540 degrees jaw rotation, surgeon-driven and adjustable
- Personalized technology enables DOF customization
- Scalable DOF enables customization of the performance envelope
- Suitable for a wide variety of surgical approach



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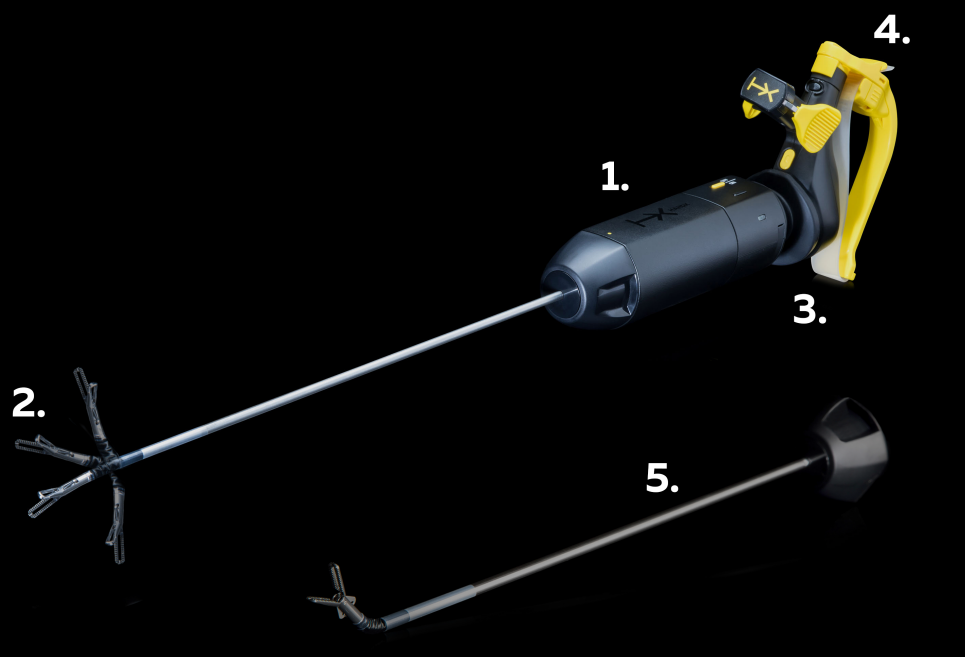
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# TECHNICAL SPECIFICATION



## HandX technical information

1. Small drive unit supporting 4 DOF articulating rigid instrument for laparoscopy
2. Wide range of efficient articulation solutions
3.
  - > 4 DOF Control interface allowing scalable motion and forces.
  - > Can interface with different instruments (rigid / flexible)
4.
  - > A single control interface for all product portfolio
  - > Natural ergonomics- fits all hand sizes, no need for manual force
  - > Single operation button
5. Disposable detachable tool



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# ORDERING INFORMATION



Description	Jaws Length	Working Length
– HandX™ set Handpiece x2, Power adapters x2		
Instrument-Monopolar Hook	Active electrode 5.77-6.50 mm	cm 32.7
Instrument-Needle Holder	mm 8.5	cm 34.5
Instrument-Fenestrated Grasper	mm 15	cm 36
Disposables Sterile Set (Cable, Arc, Pads)		



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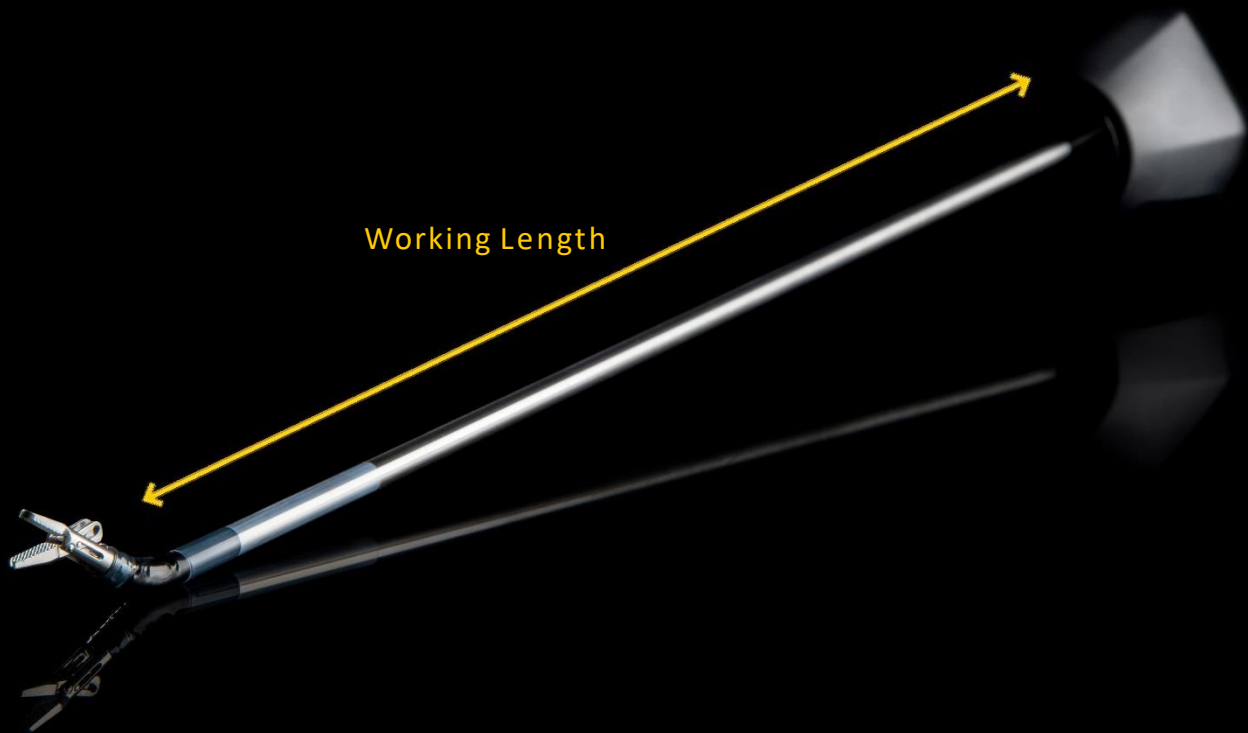
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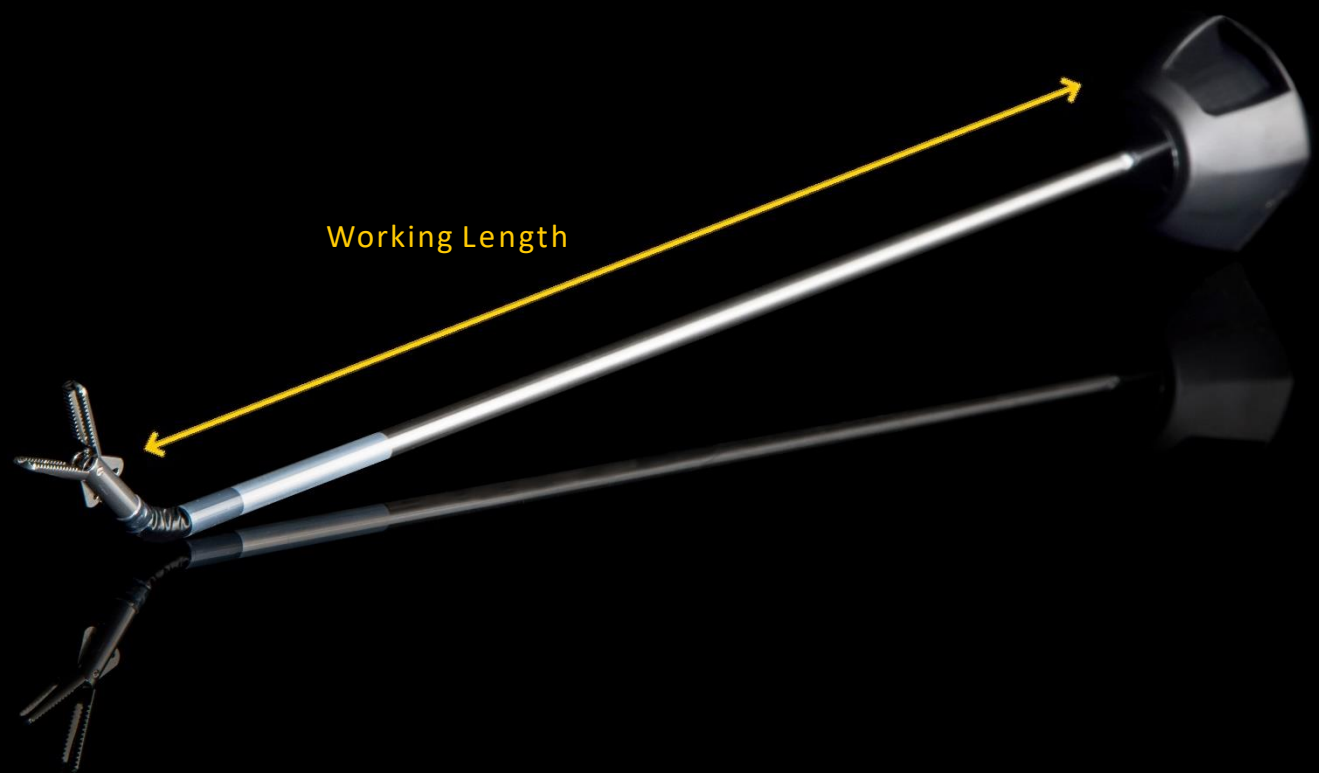
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# Grasper



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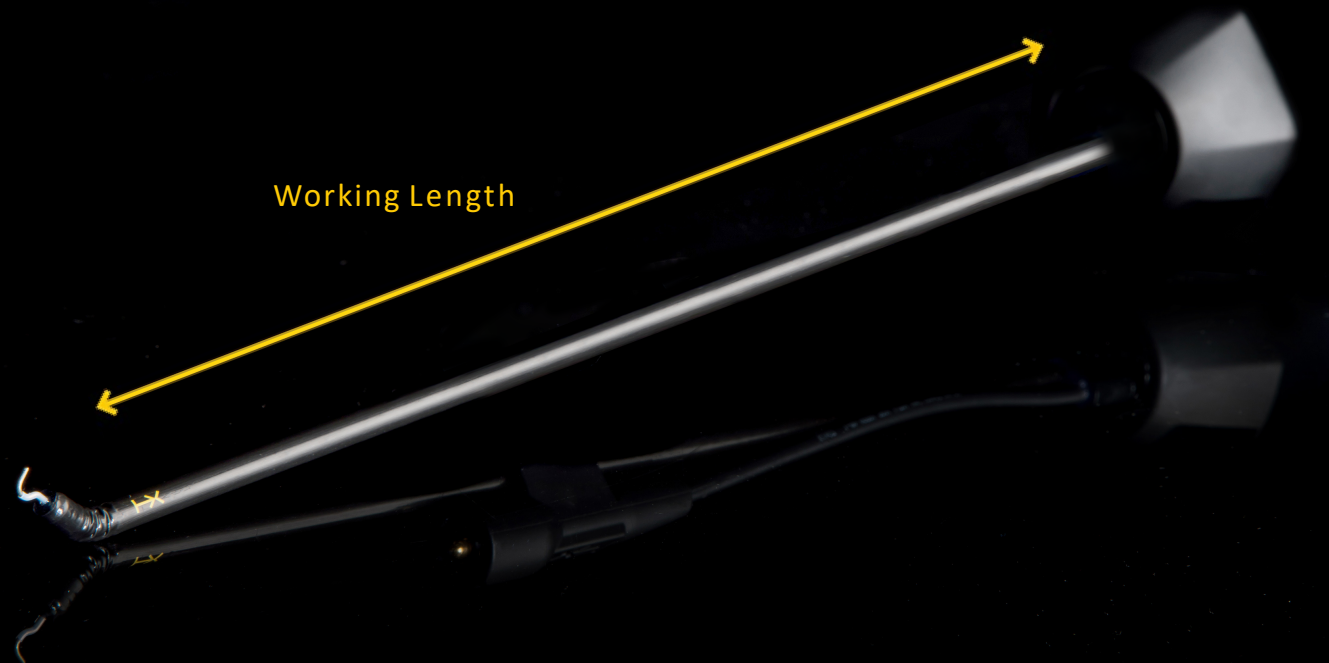
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