



by **HUMAN  
XTENSIONS™**  
Interactive Brochure

A platform that combines the advantages of robotics with the benefit of Handheld instruments. Delivering mobility, ergonomics, and broad adaption ability in a handshake.



HUMAN XTENSIONS >

HANDX™ >

COST-EFFECTIVE >

OPTIMAL FIT >

OPERATION SYSTEM >

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# HUMAN XTENSIONS™

## I-TECH Surgery at your Hand Reach

Human Xtensions is catalyzing a new medical reality, by delivering digital handtop innovation that pushes the art of surgery into new frontiers.

By combining the advantages of robotics with the benefits of cost-effective handheld instruments, our operating systems are creating a new standard in the medical device arena.

We strive for smaller, simpler to and assist in overcoming surgical known challenges

Human Xtensions handheld surgical solutions put anatomic access at your fingertips, and at your patient's bedside.

**Taking minimally invasive surgery to the next level**

**We invite you to**

**Xtend** Yourself



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# The HANDX™

## YOUR HANDHELD SOLUTION

Robust yet compact and lightweight, HandX™ is a PLATFORM that combines the advantages of ROBOTIC with the benefit of Handheld instruments electromechanical, a controlled laparoscopic device for MIS.

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

- FDA-cleared
- CE marked (MDR)
- 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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## COST EFFECTIVE

### SIMPLIFIED, MODULAR, COST EFFECTIVE

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

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

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



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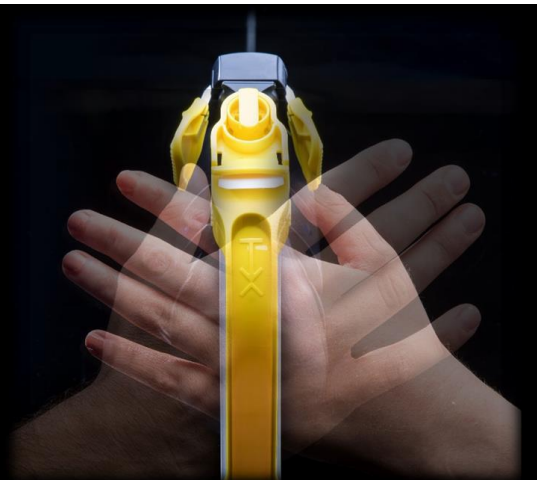
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# OPTIMAL FIT



- 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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# OPERATING SYSTEM

- Compatible with regular 5mm trocars
- Software-driven
- Interfaces with rigid and flexible instruments
- Support multiple end-effectors
- Fully articulated with 8 DOF (4 motorized, 4 manual) laparoscopic tools
- Makes the 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 to technically challenging areas.



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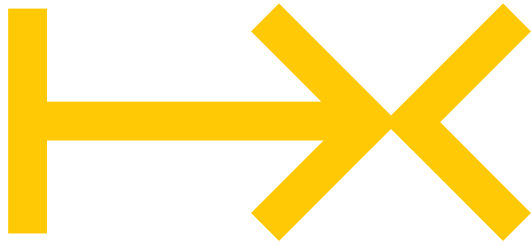
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## PERSONALIZATION - EASE OF CONTROL



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

By scaling the surgeon's motions and forces, HandX™ imitates 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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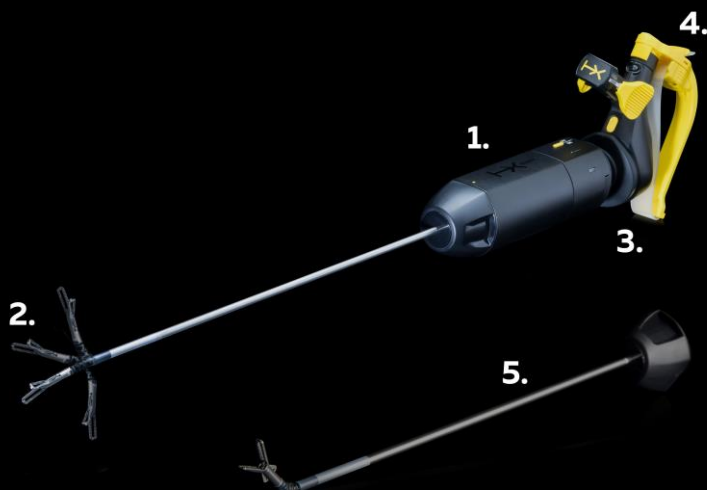
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# TECHNICAL SPECIFICATION



## 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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# TECHNICAL SPECIFICATION

Description	End effector length	Working Length
HandX™ set Handpiece x2, Power adapter x2		
Disposable Instrument Monopolar Hook	Active electrode 5 mm	32.7 cm
Disposable Instrument Needle Holder	8.5 mm	34.5 cm
Disposable Instrument Fenestrated Grasper	15 mm	36 cm
Disposables Sterile Set (Cable, Arc, Pads)		



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# HANDPIECE



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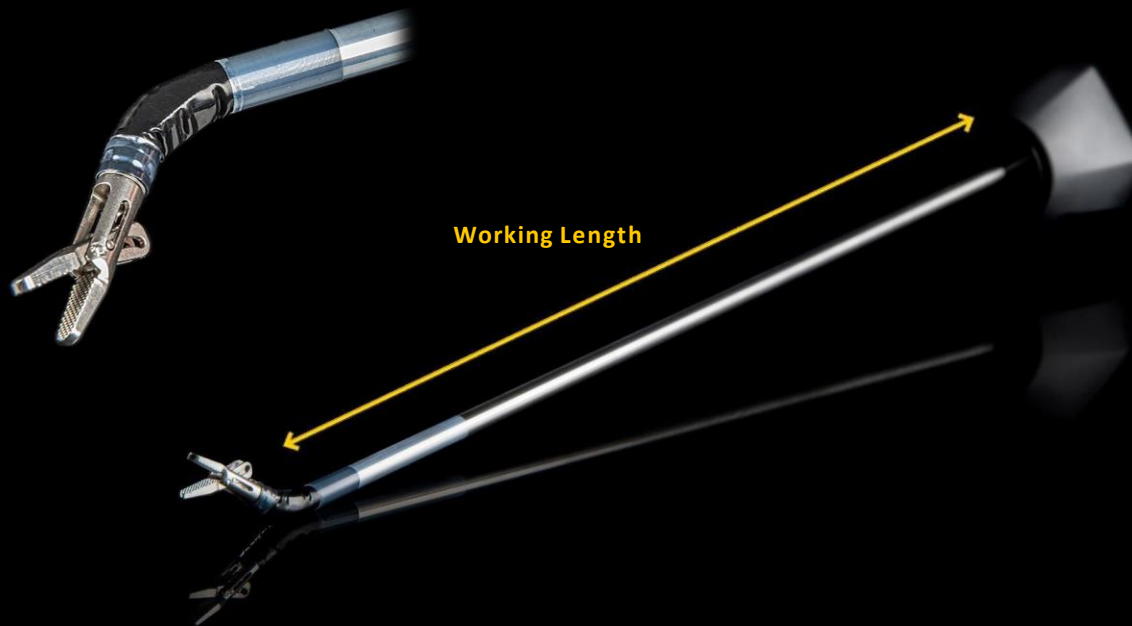
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# NEEDLE HOLDER



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# FENESTRATED GRASPER



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# MONOPOLAR HOOK



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## DISPOSABLE SET



CAN **U** HAND **X** IT?



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HANDX™



COSTEFFECTIVE



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