

# uMp micromanipulators



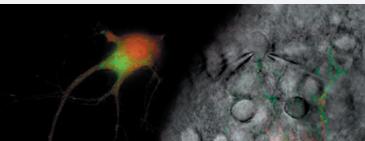
## Extreme stability and accuracy miniaturized

Closed-loop controlled  
for the high accuracy positioning  
over 20 mm range with 5 nm resolution

Easy to use – plug & play installation  
and intuitive user interface

ZERO DRIFT  
piezo drives  
provide extreme stability

Short latency PC connection  
- open source SDK and Python wrapper



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# uMp micromanipulators

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## uMp-3 | 4 micromanipulators

<b>Positioning range:</b>	20x20x20 mm <sup>3</sup>   20x20x20x20 mm <sup>3</sup>
<b>Resolution / repeatability:</b>	5 nm / 100 nm
<b>Max. speed:</b>	5 mm/s
<b>Max. load:</b>	150 g
<b>True approach angle:</b>	0 - 45   0-90 degrees
<b>4th axis:</b>	virtual   physical
<b>Stand options:</b>	Rotation, flip and/or slide
<b>Dimensions:</b>	49x77x128 mm   49x104x136 mm

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## uMp-TSC touch screen unit

- Intuitive user interface with quick buttons for all essential functions like speed adjustment, manipulator selection and memory positions
- Two RWs per controller; max. 65536 manipulators\*
- Li-Ion Battery operated (rechargeable)
- Short latency computer interface through Ethernet
- Controls all Sensapex products like uMs microscope and uMc pressure controller with one-click automations for pipette cleaning and parfocal objective change

**Dimensions:** 120x95x123 mm

\*Connecting more than two manipulators requires hub

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## uMp-RW3 | 4 rotary wheel controllers

- Intuitive fingertip feeling
- Four wheel version available for 4th virtual or physical axis
- Quick buttons for speed and manipulator selections
- USB interface to Touch Screen Controller

**Dimensions:** 170x53x170 mm

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