

# IS-900 MicroTrax™ Devices

*Precision inertial-ultrasonic motion tracking for Immersive Displays*

The IS-900 MicroTrax™ precision motion tracking devices bring an unprecedented level of convenience, comfort and elegance to immersive 3D applications. The devices are lighter and smaller to enhance the use of passive stereo applications.



## Passive Stereo Solution

You can now wear passive or active glasses with the smooth tracking technology of the IS-900 Systems. The new MicroTrax™ Head Tracker mounts easily to passive glasses and the minimal weight is so comfortable that you may forget you are wearing a tracker.



## Small and Convenient

The new MicroTrax™ devices are smaller and lighter to give greater comfort. And for greater convenience, we now offer a new docking station that acts as a resting or battery recharging cradle for the devices. We also minimized cables, added spare batteries, increased support for up to 7 wireless devices and provided an easy way to recharge batteries in-situ.

## Excellent Ergonomics

The MicroTrax™ devices have a whole new ergonomic design. The new Head Tracker is over 40% smaller than the previous generation. The Wireless Transmitter has a clip to attach onto a shirt collar, belt or anywhere else. It can also fit easily inside a shirt pocket or an eyewear retainer. The new wand design brings unprecedented comfort, especially during long-term sessions.

## Performance Specifications

MicroTrax™ devices are compatible with IS-900 VETracker and SimTracker processors only (1U chassis)

Degrees of Freedom	6 (X, Y, Z, Yaw, Pitch, and Roll) with MicroTrax™ Devices
Angular Range	Full 360° - all axis
Resolution	0.75 mm (1.5 mm Wireless) 0.05° (0.10° Wireless)
Static Accuracy	2.0 – 3.0 mm (3.0 – 5.0 mm Wireless) 0.25° RMS in Pitch & Roll, 0.50° RMS in Yaw (Standard MicroTrax) 0.50° RMS in Pitch & Roll, 1.00° RMS in Yaw (Wireless MicroTrax)
Update Rate	180 Hz Nominal (120 Hz Nominal Wireless)
Latency	4 ms Typical
Maximum Tracked Devices	4 for SimTracker (Wired or Wireless) 7 for VETracker (Wired or Wireless)
Standard Cable Lengths	12.0 m (IS-900 processor to MicroTrax Device)
Maximum Cable Lengths	System configuration dependent (ask your InterSense Representative)

## MicroTrax™ Devices and Accessories

### Head Tracker

Available wired and wireless  
Weight: 40g  
Dimensions: 4.00 in x 0.61 in x 0.54 in



### Wireless Transmitter for Head or Hand Tracker

Weight: 65g  
Dimensions: 3.00 in x 1.75 in x 1.34 in



### Wand

Wireless Weight: 170g      Wired Weight: 140 g

Dimensions: 6.88 in x 4.00 in x 2.12 in



### Docking Station

- Accepts wireless MicroTrax™ devices:
- Wand
- Wireless transmitter
- 2 spare batteries
- Acts as a battery recharging station

Weight: 700g  
Dimensions: 8.80 in x 8.60 in x 2.00 in



### Hand Tracker

Available wired and wireless  
Weight: 45 g  
Dimensions: 4.5 in x 3.0 in x 0.75 in

- Mounting strap included
- Multiple input button interface available as an option



## Batteries and Rechargers

Each wireless device includes:

- One spare battery
- One individual battery recharger (not included if a recharging station is ordered)

Specifications are determined in a controlled and quantified environment.  
Please visit the InterSense website for up to date specifications at [www.intersense.com](http://www.intersense.com)

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