AiQ. Synertial



Ultimate accuracy

Making best-in-class gloves since 2010

- Finger Freedom with with new 'Ring System'
- Use scanner to extract accurate finger sizes
- Fingertips free to type and use devices
- Proprietary physical finger jig for precision calibration
- Industry first forearm sensor
- •SD Card for up to 40 hrs of recording
- SDK and Sample Code
- Export CSV positions, FBX or BVH
- Real-time Unity, UE4, MoBu & Tecnomatix Plugins
- Scaling controls for every bone (with or without sensor)
- •Up to 180 FPS

"Thanks for your help. The setup was much easier than last time. Great improvement."

- Raphael Siebert, EST, Kaiserslautern, Germany.



VIVE-hybrid ready

- Ships with HTC VIVE plug-in (no HW)
- 6DoF Zero-drift motion capture
- Calibration for VIVE & Fingers together
- Transmits via Bluetooth or WiFi
- Sync multiple gloves & Vive Pucks
- Fastest Calibration in the Industry

"We managed to get our tests done and I must say they performed very well compared to some of the other gloves we tested"

 Patrick Lowry, Senior GC Technologist since 2008, London

"The Luster data looks really good, wow!"

- Lee Dickholtz, Metamotion, Oakland, CA.



System specification:

Power

Power supply External 5V

Battery capacity: Based on customers' choice

System operation voltage 3.3V

System power consumption Total 8 sensors ~0.6W
Operation time 6 hours per charge

Data transmission

Bluetooth 5.0

Wi-Fi (with snap on dongle) 2.4G, support 802.11 b/g/n, up to 65Mbps

*Wi-Fi range relative to the PC, gateway performance and environment

*BT range - 5 metres radius

Storage

Non removable Flash 1GB (8 sensors, 120fps, about 20 hours)

Sizes

Finger Rings and wraps (in 3 sizes)

Mix and match for best fit

Palm Glove & Sensor Spring Coils Sml, Med or Large

Certification

(Wi-Fi and BT modules have own certifications) CE, FCC, FCC, IC, TELEC, RED

Software

Software support SynDash, SynShow

Real time Plug-ins Unity, UE4, MoBu, Siemens PSH & Jack





Current consumption 18mA Accelerometer range +/- 8g

Gyroscope range +/- 2000 °/s

Sensor Report Rate:

Gyro rotation Vector 1000 times/sec **Rotation Vector** 400 times/sec Gravity00 times/sec 400 times/sec **Linear Acceleration** 400 times/sec Accelerometer 500 times/sec 400 times/sec Gyroscope Magnetometer 100 times/sec



Hub Specification:

Power

Supply voltage 3.3~5V
Operation voltage 3.3V

Data transmission

Bluetooth (without WiFi module attached) MtM+ Technology M905, Bluetooth 5.0

*(Bluetooth in hub will be disabled when WiFi is attached)

 $*\,BT\,range$ - 5 metres radius

WiFi (with clip-on dongle) 2.4G, support 802.11 b/g/n, up to 65Mbps

*WiFi range relative to the PC, gateway performance and environment

Storage

Non Removable Flash 1GB (8 sensors, 120fps, about 20 hours)

Certification

Certification CE, FCC (M905)

Dimensions

Outer/Top Ø25.4mm x 5.5mm
Base Ø35mm x 3.2mm
Combined Ø35mm x 8.7mm

Overall Dimensions (WiFi attached)

dongle Ø33mm x 11.3mm hub + dongle Ø35mm x 12.3mm



Mocap SW comparison sheet

PC Capture & Kinematics Processing System

	SynDash-Exo	SynDash-Pro
Shows real time m <mark>ode</mark> l	Yes	Yes
Standard Mocap Tools	Yes	Yes
Multiple devices in the same scene	Yes	Yes
Calibration Parameters	Preset	Adjustable
Modify skeletons of rec <mark>ord</mark> ed motion data	No	Yes
Skeleton Parameters	Templates	Templates/Adjustable
One keystroke, 2 poses calibration	Yes	Yes
Export BVH, FBX, CSV Positions	Yes	Yes
Graph Mode Live or Recorded (Unlimited Windows)	No	Yes
Configure WiFi & Recording	Yes	Yes
Live Sensors State Report	Colored	Colored
Gang Calibration & Recording for multiple devices	Yes	Yes
Show Local Coordinates on every joint	Yes	Yes
Graph		
Segment Rotations	N/A	Yes
Joint position relative to another position	N/A	Yes
Joint position absolute	N/A	Yes
Max graph view windows	N/A	Yes
OS		
Android Capture System	Optional	Optional

Yes

Yes



