CHINGMU

MC Series

RESEARCH GRADE OPTICAL MOTION CAPTURE CAMERA

Precise Capture, Full-Scene Coverage

Highlights of Excellence

- **High-Precision Tracking**
  3D accuracy ±0.06mm
- **Strong Adaptability**
  Supports ultra-large spaces, underwater, outdoor, and other scenarios
- **Data Visualization**
  Covers 3Dspatial position, kinematics, dynamics, electromyography data, etc
- **Precise Marker Placement**
  Ergonomically designed to meet the motion capture needs of different body parts
- **User-Friendly**
  Effortless Operationand Flexible Deployment
- **High Frame Rate**
  Up to 400fps
- **Ultra-Low Latency**
  Minimum 2.5ms
- **Integrated System**
  Seamlessly Integrates Motion Capture System, Force Plate, Plantar Pressure Measurement Mat, EMG Device, etc
- **Synchronous Collection**
  Supports Timecode and Genlock Synchronization
- **Customized Services**
  Customizedanalysissoftwarefor various scenarios such as posture assessment and rehabilitation training

Application Scenarios


Athletic Performance Evaluation


Gait Analysis


Underwater Gait Analysis


Lower Limb Movement Performance Research


Sports Training


Neuroscience Research


Medical Rehabilitation


Biomechanics

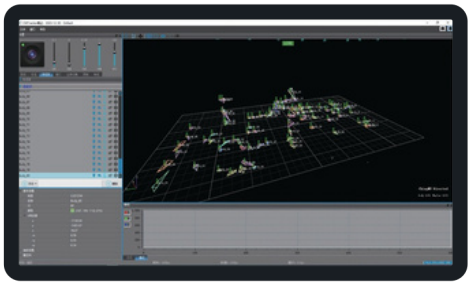

Ergonomics


Rehabilitation Robotics


Exoskeleton Robotics

Motion Capture Software CMAvatar

- 40+ Character Capture
- Effortless Operability and Flexibility
- Unique Anti-occlusion Algorithm
- Facilitates Synchronous Hardware Actuation
- Integrated Electromyographic and Force Measuring Systems



Open SDK

The motion capture software independently developed by CHINGMU supports VRPN, LiveStream and other protocols. The SDK is completely open source and compatible with Matlab, Simulink, Visual3D, AnyBody Modeling System, OpenSim and other biomechanics and motion analysis software. It supports connecting mainstream brand electromyographs, force platforms and other equipment. The SDK supports C/C++, Python, C#, Windows, Linux, Android and other languages and platforms.

MC Series Camera Parameters

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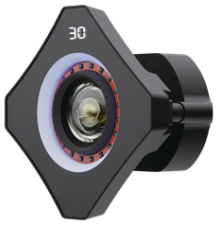
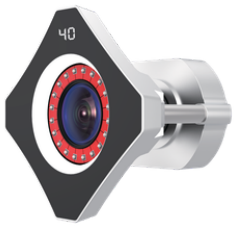
MC1300


MC3000


MC4000


MC4000W

MODEL	MC1300	MC3000	MC4000	MC4000W
Resolution	1280*1024	1936*1464	2048*2048	2048*2048
Maximum frame rate	210fps	400fps	180fps	180fps
Focal length	4.0-12mm	5mm	12mm	6mm
H FOV	90°	82°	53°	89°
V FOV	70°	67°	53°	89°
Maximum passive tracking distance*	15m	25m	30m	20m
Maximum active tracking distance*	30m	50m	60m	40m
3D accuracy	+/-0.08-0.12mm	+/-0.08mm	+/-0.06mm	+/-0.1mm
Interface type	RJ45			
Synchronization mode	NetWork			
Infrared fill light	Yes			
Number of LEDs	20	20	20	20
Optical finger	Yes			
Full body tracking	Yes			
Outdoor enhancement technology	No	Yes	No	No
Total power	5.5 - 18w	13 - 24w	6 - 18w	6 - 18w
Image mode	Raw Grayscale			
Number of cascades	100+	100+	100+	100+

*Measurements were taken using a 16mm diameter marker.
The observation range can also be increased by supplementing light sources or using markers of larger diameter.

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WeChat Official Account

CHINGMU Official Website

CHINGMU YOUTUBE