FLEX 3

**SURPRISING AFFORDABILITY**
With systems starting at under $7k, Flex 3 cameras deliver the industry's most affordable high-performance tracking platform.

**EFFICIENT PERFORMANCE**
Our cameras are engineered for maximum capture efficiency, offering sub-millimeter tracking at a fraction of the price you would expect.

**WORLD CLASS LENSES**
We custom design our own super low distortion, high illuminance lenses. Our “fast glass” dramatically increases your camera's range and capture volumes.

**REFERENCE VIDEO**
Any of your Flex 3 capture cameras can also operate in full frame grayscale, for flexible reference video that’s calibrated into your mocap system.

**FILTER SWITCHER**
Move from visible to infrared imaging with a single mouse-click, enabled with the FS add-on.

**OPTISYNC**
OptiTrack’s custom sync system, which sends and receives sync signals over USB cable. As a result, cabling is reduced by 50%, which enables simpler setup.

**ON-BOARD PROCESSING**
Our heralded real time, on-camera image analysis delivers clean, reliable data to your PC with minimal demands on your CPU for efficient system scaling.

**CAMERA CONTROL**
Control exposure, frame rate, resolution, image processing mode, LED intensity, and more directly from the application UI.

**FREE CAMERA SDK**
Integrate Flex 3 cameras into your custom tracking and vision applications with the free Camera SDK, which offers a simple C++ interface.
**Technical Specifications**

**Camera Body**
- Width: 1.78 inches (45.2 mm)
- Height: 2.94 inches (74.7 mm)
- Depth: 1.44 inches (36.6 mm)
- Weight: 4.20 ounces (0.1 kg)
- Mounting: 1/4”-20 tripod thread
- Status Indicators: 2 digit numeric LEDs

**Image Sensor**
- Pixel Size: 6 µm × 6 µm
- Imager Size: 4.5 mm × 2.88 mm
- Imager Resolution: 640 × 480 (0.3 MP)
- Frame Rate: 25, 50, 100 FPS
  - Frame decimation (transmit every Nth frame)
- Spatial decimation:
  - 320 × 240
  - 160 × 120
- Accuracy: Sub-millimeter
- Latency: 10 ms
- Shutter Type: Global
- Shutter Speed:
  - Default: 1000 µs
  - Minimum: 20 µs

**Image Processing Types**
- Object (Centroids)
- Precision (Grayscale)
- Segment (Thresholded)
- MJPEG Grayscale
- Raw Grayscale

**Lens & Filter**
- Default Lens:
  - 4.5mm F#1.6
  - Horizontal FOV: 46.2°
  - Vertical FOV: 34.7°
- Optional Lenses:
  - 3.5 mm F#1.6
  - Horizontal FOV: 57.5°
  - Vertical FOV: 43.1°
  - 5.5 mm F#1.6
  - Horizontal FOV: 38.0°
  - Vertical FOV: 28.5°
- M12 Lens Mount
- Adjustable focus w/ spring assist
- 800 nm IR pass filter
- Optional: 800nm IR pass filter w/ Filter Switcher

**LED Ring**
- 26 LEDs
- 850 nm IR
- Adjustable brightness
- Strobe or continuous illumination
- Removable

**Input/Output & Power**
- Data: USB 2.0
- Camera Sync: USB 2.0 or Wired Sync
- Power: USB 2.0
  - Standard: 5V @ 490mA
  - High Power: 680mA

**System Requirements**
- Windows XP/Vista/7/8
- 1GHz processor
- 1GB of RAM
- 50MB of available disk space
- USB 2.0 Hi-speed port

**In the Box**
- 1 Flex 3 camera (part no: FL-R2)
- 1 Quick start guide

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