FLEX 13

OptiTrack

EXPANSIVE COVERAGE

With its wide 56° FOV, the Flex 13 can track complex, multiple-actor scenes with an exceptional volume-to-setup ratio.

EXCEPTIONAL DATA

Featuring 4x the resolution of our popular V100 cameras, the Flex 13 delivers sub-millimeter marker precision, in most applications less than +/- 0.10 mm.

WORLD CLASS LENSES

We custom design our own super low distortion, high illuminance lenses. Our "fast glass" dramatically increases camera range and capture volumes.

REFERENCE VIDEO

Any of your Flex 13 capture cameras can also operate in full frame grayscale, for reference video that's sync'd and calibrated with your mocap system.

ON-CAMERA AIM ASSIST

One person can efficiently setup their system with our on-camera Aim Assist. Activate your camera for aiming with one button press on the back of the camera.

FILTER SWITCHER

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

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 13 cameras into your custom tracking and vision applications with the free Camera SDK, which offers a simple C++ interface.

CAMERA BODY

- Width: 2.12 inches (53.8 mm)
- Height: 3.19 inches (81 mm)
- Depth: 1.67 inches (42.4 mm)
- Weight: 6.60 ounces (187 g)
- Mounting: 1/4"-20 tripod thread
- Status Indicators:
  – 2 digit numeric LEDs
  – 1 bicolor status LED

IMAGE SENSOR

- Pixel Size : 4.8 µm × 4.8 µm
- Imager Size : 6.144 mm × 4.9152 mm
- Imager Resolution : 1280 × 1024 (1.3 MP)
- Frame Rate: 30-120 FPS (adjustable)
- Accuracy: Sub-millimeter
- Latency: 8.3 ms
- Shutter Type: Global
- Shutter Speed:
  – Default: 500 µs
  – Minimum: 20 µs
  – Maximum: 7.5 ms (at 120 FPS)

IMAGE PROCESSING TYPES

- Object (Centroids)
- Precision (Grayscale)
- Segment (Thresholded)
- MJPEG Grayscale
- Raw Grayscale

LENS & FILTER

- Default Lens: 5.5mm F#1.8
  – Horizontal FOV: 56°
  – Vertical FOV: 46°
- Optional Lens: 8 mm F#1.8
  – Horizontal FOV: 42°
  – Vertical FOV: 34°
- M12 Lens Mount
- Adjustable focus w/ spring assist
- 800 nm IR pass filter
- Optional: 800nm IR pass filter w/ Filter Switcher

LED RING

- 28 LEDs
- 850 nm IR
- Adjustable brightness
- Strobe or Continuous Illumination
- Removable

INPUT/OUTPUT & POWER

- Data: USB 2.0
- Camera Sync: USB 2.0 (via OptiSync)
- Power: USB 2.0 @ 1A

SYSTEM REQUIREMENTS

- Windows XP/Vista/7
- 1GHz processor
- 1GB of RAM
- 50MB of available disk space
- USB 2.0 Hi-speed port
- OptiHub 2 (required for IR LED power)

IN THE BOX

- 1 Flex 13 camera (part number: FL-13)
- 1 Quick Start guide