

Flex 3 / Flex 13

Product Details

The OptiTrack Flex series offers compact and affordable motion capture with precise real-time tracking, perfect for small spaces and detailed motion capture setups.



Flex 3 / Flex 13

Specifications

	Flex 3	Flex 13
Performance		
Maximum Frame Rate (Full Resolution)	100 Hz	120 Hz
Selectable Frame Rates	25, 50, 100 fps	30 - 120 fps
Latency @ Max Frame Rate and Full Resolution	10 ms	8.3 ms
3D Accuracy	+/- 0.50mm	+/- 0.20mm
Marker Type	Passive	
Maximum Detection Distance	6 m (20 ft.)	9 m (30 ft.)
Sensor		
Resolution	0.3 MP	1.3 MP
Pixel Count	Global	
Shutter Type	Yes	
Adjustable Exposure	1 ms	.25ms
Shutter Speed (Default)	0.01 ms	0.02 ms
Shutter Speed (Min.)	7.6 ms	7.5 ms
Physical Attributes		
Width	45.2 mm (1.78 in.)	53.8 mm (2.12 in.)
Height	7.47 mm (2.94 in.)	81.0 mm (3.19 in.)
Depth	36.6 mm (1.33 in.)	42.4 mm (1.67 in.)
Weight (includes lens)	0.1 kg (0.26 lbs.)	0.187 kg (0.41 lbs.)
Base Materials	Aluminum	
Color	Black	
LED Rings		
Contains	26	28
Number of LEDs	850	850 nm
LED Wavelength	Normal	
LED Output	No	
Adjustable Brightness	Strobe or continuous	
Optical Attributes		
Lens FOV (HxV)	46° x 35° 58° x 45° (optional)	56° x 46° 42° x 34° (optional)
Lens Focal Length	4.5 mm 3.5 (optional)	5.5 mm 8 mm (optional)
Lens Adjustable Focus	Yes	
Lens Adjustable F-Stop	No (f# 1.6)	No (f#1.8)
Filter Wavelength	800 nm long pass	
Filter Switcher	Optional	
Filter Switcher Wavelength	Visible (700nm) 800 nm or 850 nm long pass	
Electrical Attributes		
Power Inpt	USB 2.0	
Power Draw (max)	5V @ 490 mA 680 mA (high-power)	5V @ 700 mA
Connector	USB mini-B	

Flex 3 / Flex 13

Specifications

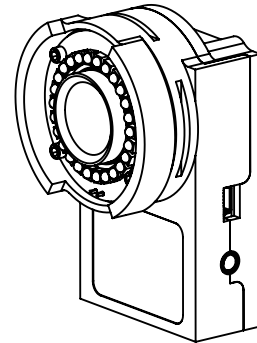
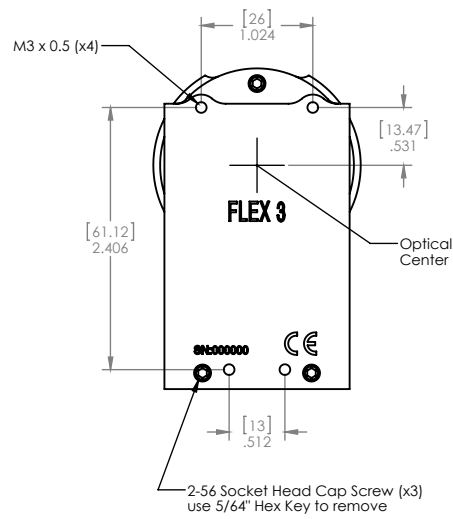
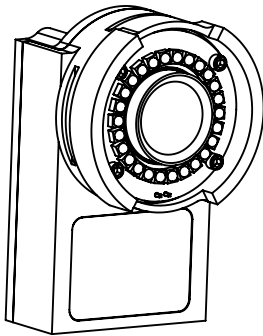
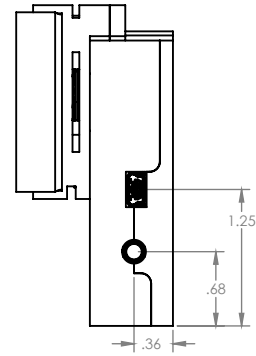
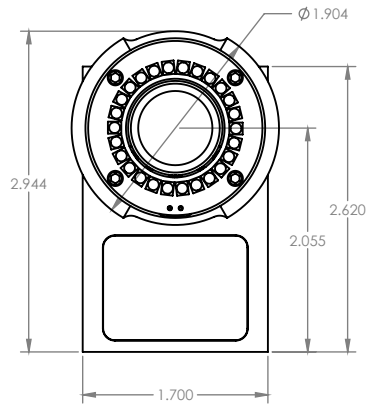
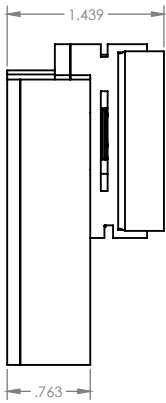
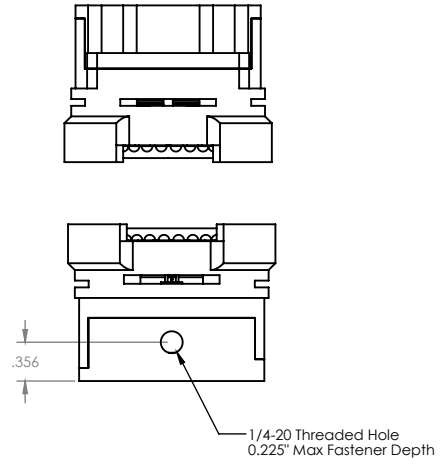
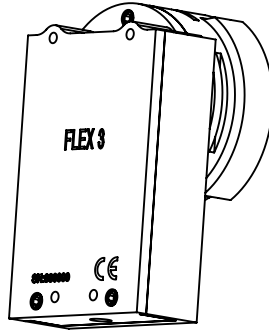
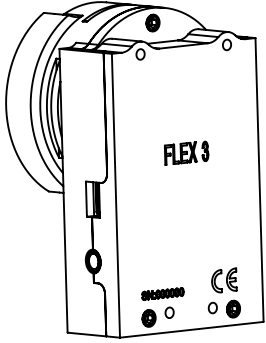
Flex 3

Flex 13

Data Architecture	
Communication	USB 2.0
USB Protocol	USB 2.0
Camera Sync	OptiTrack Proprietary or wired
Image Processing	Object (Centroid) - Older version - lower performance
	Object (Centroids)
	"Precision (Grayscale) Segment (Thresholded) MJPEG Grayscale Raw Grayscale"
Grayscale Depth	8-bit
Status Indicators	
Numeric LED	2-digit
LED Health and Activity	Yes
Mounting	
Type and QTY	1/4"-20
Environment	
IP Rating	IP4X
Operational Temperature	0 - 50°C
Storage Temperature	-40 - 70°C
RoHS Compliant	Yes
CE	Yes

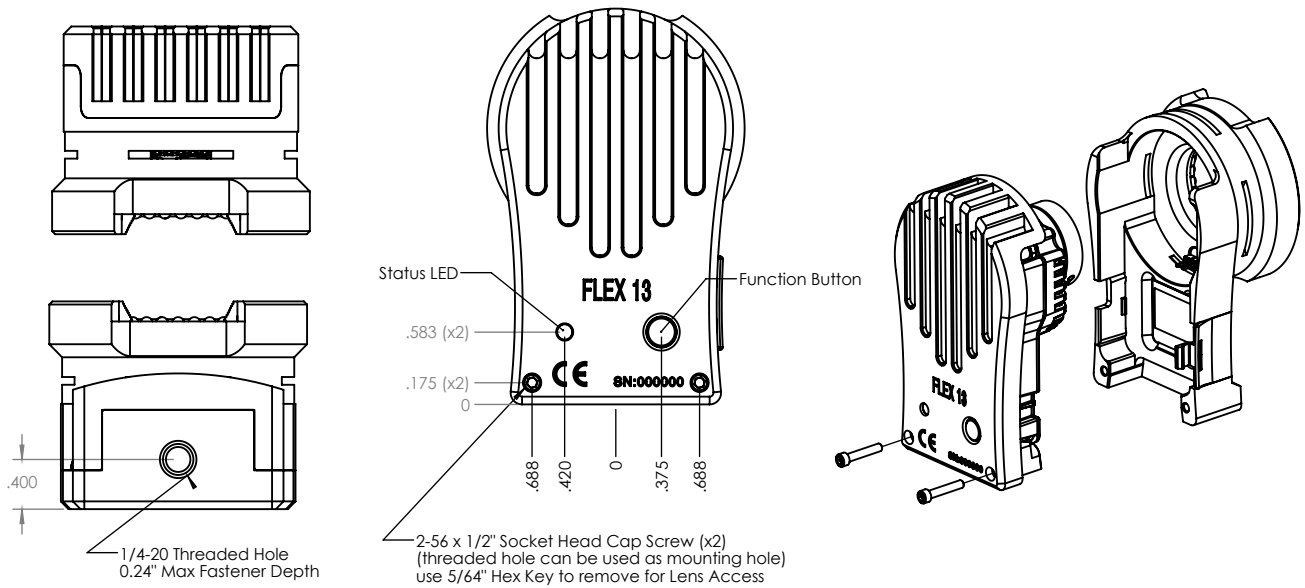
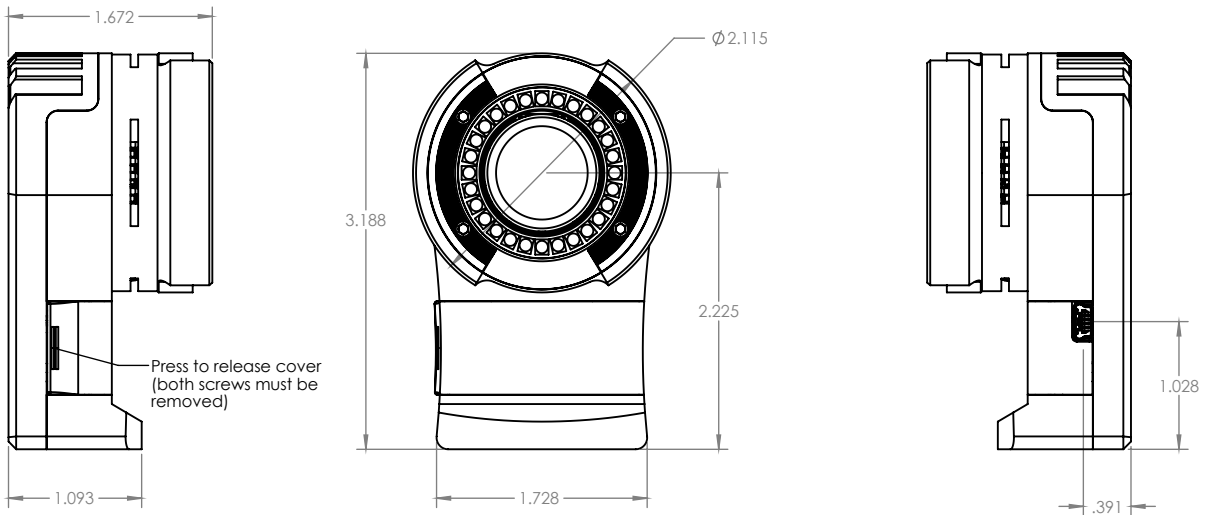
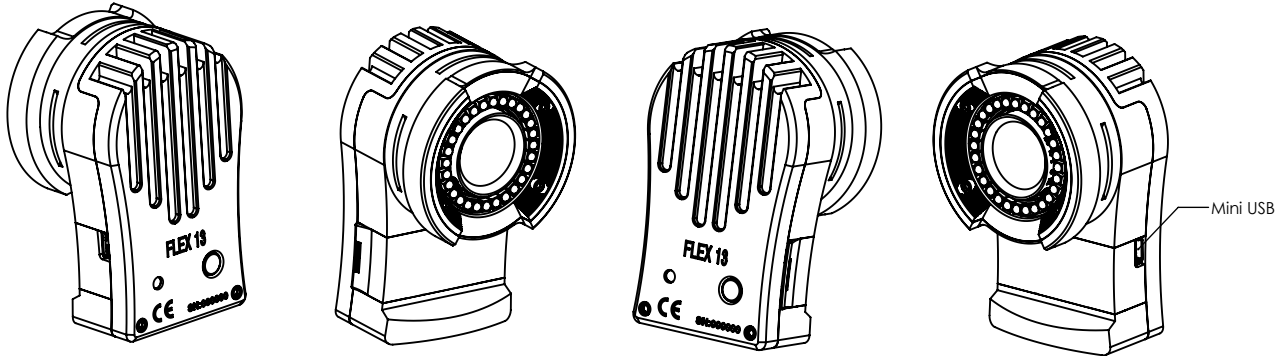
Flex 3

Technical Drawings



Flex 13

Technical Drawings



All specifications are subject to change without notification.

© 2025 NaturalPoint Inc. dba OptiTrack. All rights reserved. NaturalPoint, OptiTrack, Motive, trademarked slogans and logos are the property of NaturalPoint. All other product names are trademarks or registered trademarks of their respective companies 06.25

OptiTrack