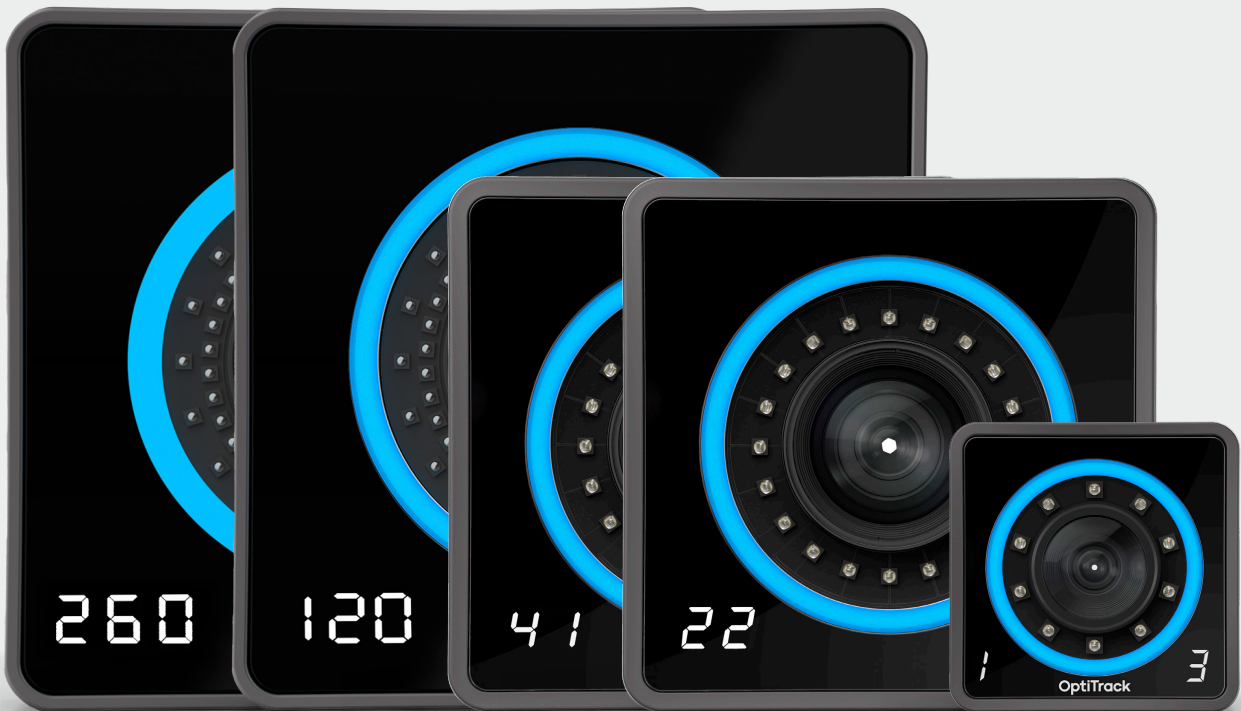


Prime^x Cameras

Product Details

Push the limits of precision with Prime^x. Prime^x offers fast frame rates and unparalleled tracking fidelity for high-performance motion capture.



Prime^x Cameras

Specifications

	Prime ^x 13	Prime ^x 13W	Prime ^x 22	Prime ^x 41	Prime ^x 41W	Prime ^x 120	Prime ^x 120W	Prime ^x 260	Prime ^x 260W	
Performance										
Maximum Frame Rate (Full Resolution)	240 Hz		360 Hz	180 Hz		300 Hz		150 Hz		
Maximum Possible Frame Rate	1000 Hz									
Selectable Frame Rates	Yes									
Latency @ Max Frame Rate and Full Resolution	4.2 ms		2.8 ms	5.55 ms		3.33 ms		6.66 ms		
3D Accuracy	+/- 0.2 mm		+/- 0.3 mm	+/- 0.1 mm	+/- 0.3 mm	+/- 0.1 mm		TBD		
Marker Type	Active/Passive									
Maximum Detection Distance	25m / 16m	15m / 9m	30m / 21m	45m / 30m	30m / 21m	90m / 40m	40m	TBD	TBD	
Sensor										
Resolution	1280 x 1024		2048 x 1088	2048 x 2048		4096 x 3072		5120 x 5120		
Pixel Count	1.3MP		2.2MP	4.1MP		12.0MP		26MP		
Shutter Type	Global									
Adjustable Exposure	Yes									
Shutter Speed (Default)	0.25 ms									
Shutter Speed (Max.)	0.01 ms									
Shutter Speed (Min.)	3.9 ms at 240 fps		2.5 ms at 360 fps	4.0 ms at 250 fps		3.13 ms at 300 fps		6.2 ms at 150 fps		
Physical Attributes										
Width	68.9 mm (2.7")		126 mm (4.96")	126 mm (4.96")		168 mm (6.61")				
Height	68.9 mm (2.7")		126 mm (4.96")	126 mm (4.96")		168 mm (6.61")				
Depth	54.6 mm (2.1")		107 mm (4.19")	132 mm (5.16")		161.7 mm (6.37")		140.2 mm (5.7")		
Weight (includes lens)	0.32 kg (0.7 lbs)		1.26 kg (2.77 lbs)	1.36 kg (3.0 lbs)		2.88 kg (6.3 lbs)		2.70 kg (5.96 lbs)		
Base Materials	Aluminum & Polycarbonate									
Color	Black & Gray									
Aim/Focus Assist Spotlights	No									
Ringlight										
Contains	Yes									
Modular	No									
Number of LEDs	10		20			60				
LED Wavelength	850 nm, 940 nm (optional)									
LED Output	High-Power	Wide, High-Power	High-Power	High-Power	Wide, High-Power	High-Power	Wide, High-Power	High-Power	Wide, High-Power	
Optical Attributes										
Lens FOV (HxV)	56° x 46°	82° x 70°	79° x 49°	51° x 51°	65° x 65°	51° x 39°	65° x 51°	57° x 57°	74° x 74°	
Lens Focal Distance	5.5 mm	3.5 mm	6.8 mm	12 m	8.9 mm	24 mm	18 mm	12 mm	8.9 mm	
Aperture Size	f / 1.8	f / 2.4	f / 1.6	f / 1.8		f / 2.5		f / 1.8		
Lens Adjustable Focus	Yes									
Lens Adjustable F-Stop	No			Yes						
Filter Wavelength	850 nm bandpass 800 nm longpass (optional) 940 nm bandpass (optional)			850 nm bandpass 940 nm bandpass (optional)						

Prime^x Cameras

Specifications Continued

Prime^x 13 Prime^x 13W Prime^x 22 Prime^x 41 Prime^x 41W Prime^x 120 Prime^x 120W Prime^x 260 Prime^x 260W

Optical Attributes Continued

Filter Switcher	Optional	N/A	Optional
Filter Switcher Wavelengths	850 nm bandpass 800 nm longpass (optional)	N/A	850 nm bandpass 940 nm bandpass (Optional)

Electrical Attributes

Power Input	PoE	PoE+	PoE++
IEEE Standard	IEEE 802.3af	IEEE 802.3at	IEEE 802.3bt (Type 4)
Power Draw (@PSE)	15 W	30 W	90 W
Connector	RJ45		
Cabling	Cat 6 or Cat 6a (Highly recommended)		

Data Architecture

Communication	GigE Ethernet		
Ethernet Protocol	OptiTrack Proprietary		
Camera Sync	Yes		
Image Processing	Object Segment Raw Grayscale MJPEG Grayscale Duplex Mode (Patent Pending)		
Grayscale Depth	8-bit	10-bit	

Status Indicators

Numeric LED	2-digit	3-digit
Full-color LED Health and Activity	Yes	

Mounting

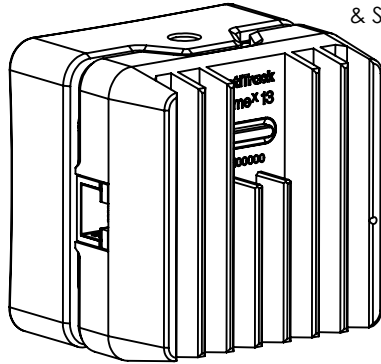
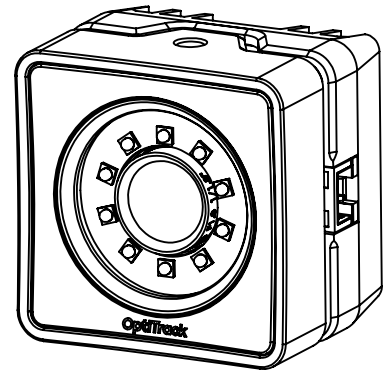
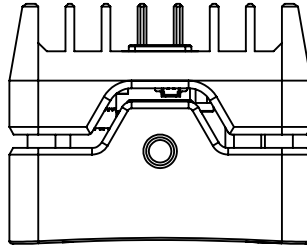
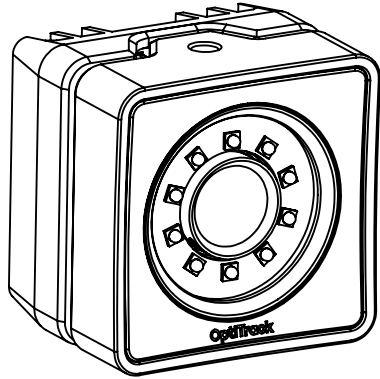
Type and QTY	1/4"-20 (2X)	1/4"-20 (2X) 3/8-16	3/8-16 (2X)
Precision Alignment	No		

Sensor

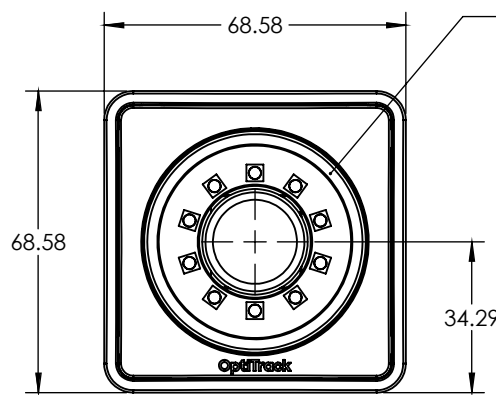
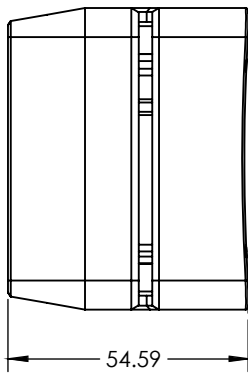
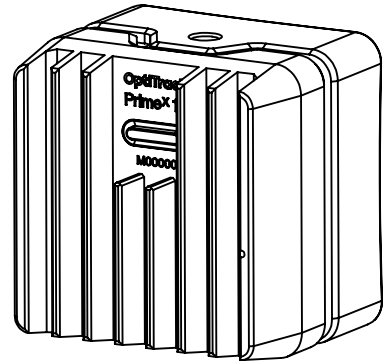
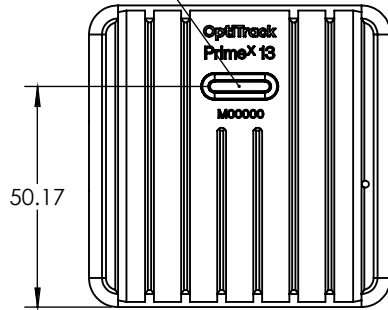
IP Rating	IP4X
Operational Temperature	0 - 50 °C
Storage Temperature	-40 - 70 °C
RoHS Compliant	Yes
CE	Yes

Prime^x 13

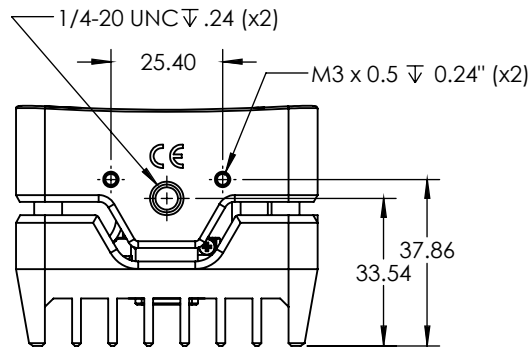
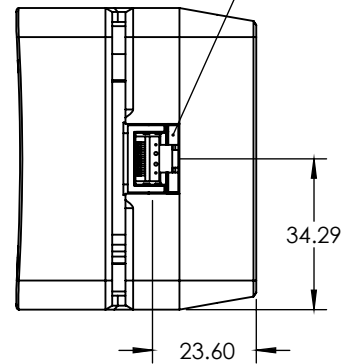
Technical Drawings



Aim Assist Button
& Status Indicator

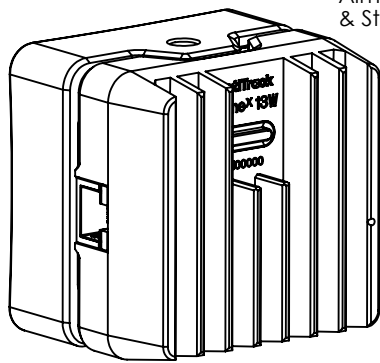
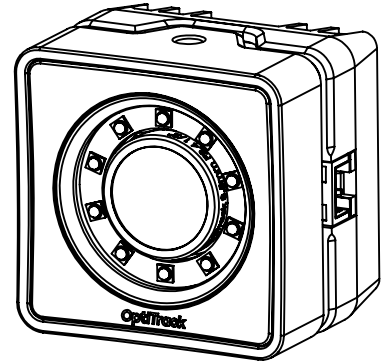
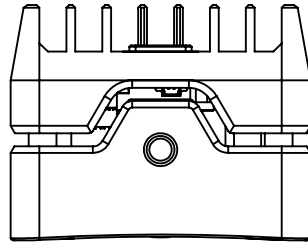
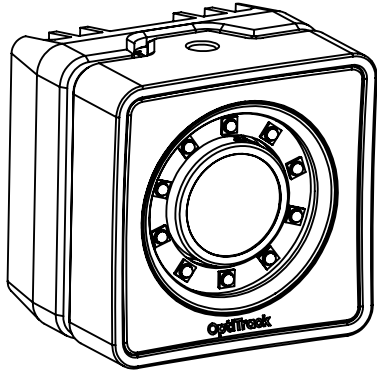


Status Indicator Ring
GigE & PoE Jack

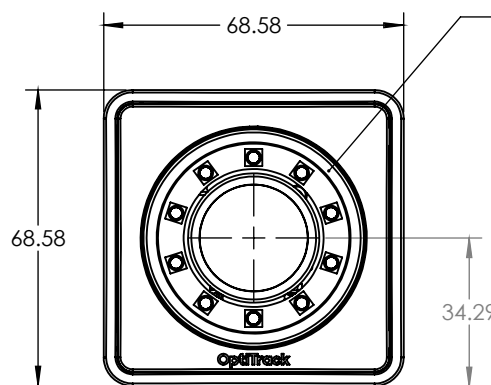
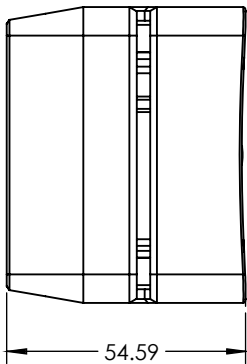
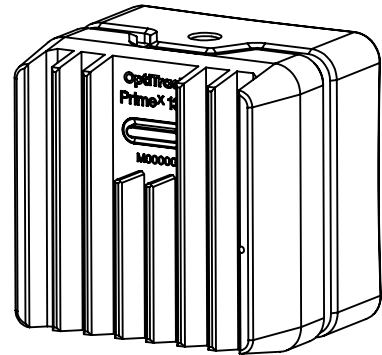
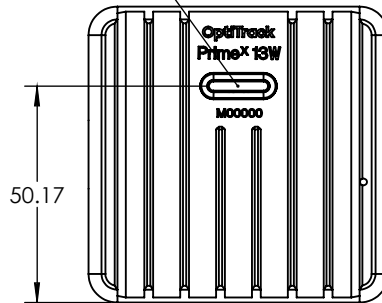


Prime^x 13W

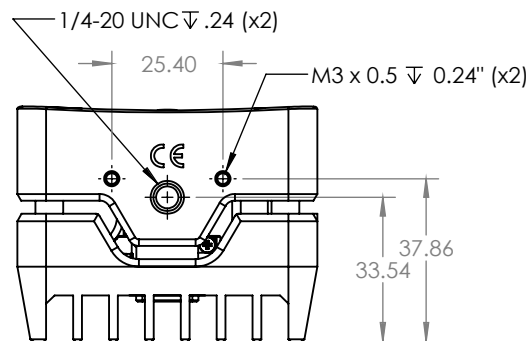
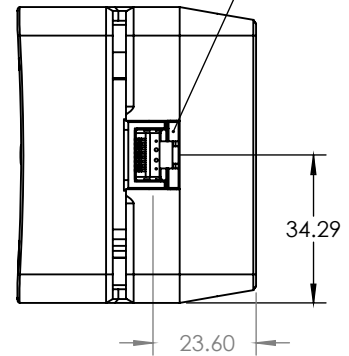
Technical Drawings



Aim Assist Button
& Status Indicator

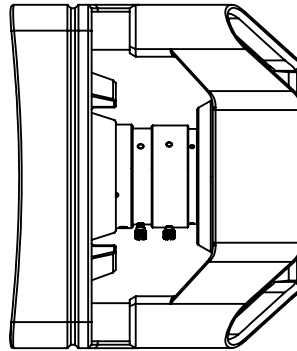
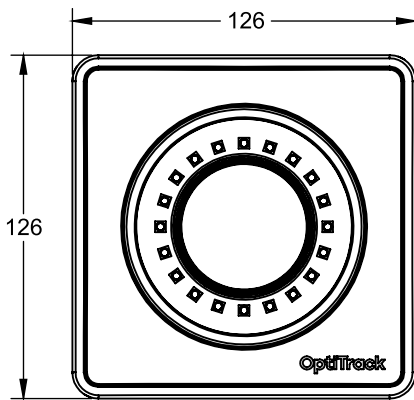
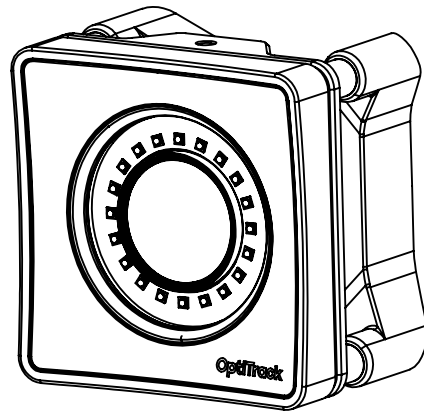
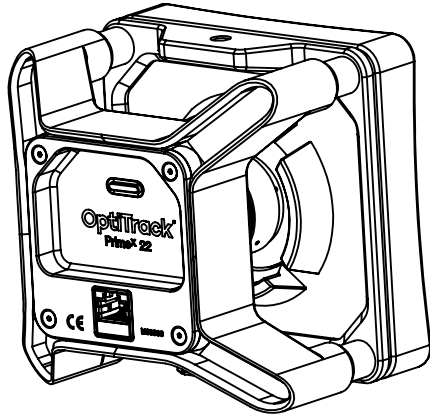


Status Indicator Ring
GigE & PoE Jack

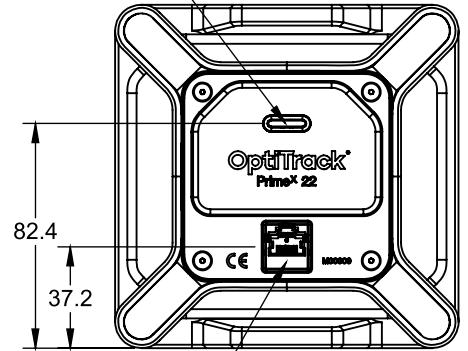


Prime^x 22

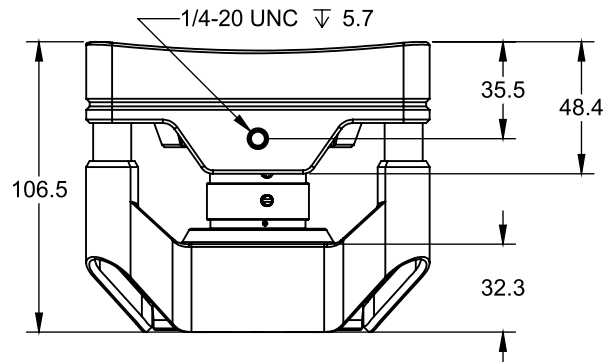
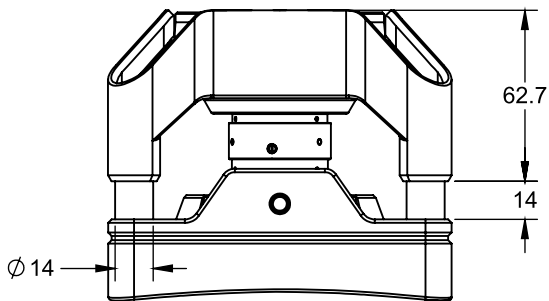
Technical Drawings



Aim Assist Button
& Status Indicator

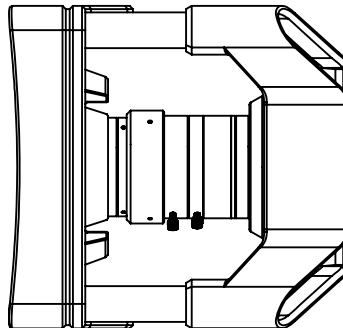
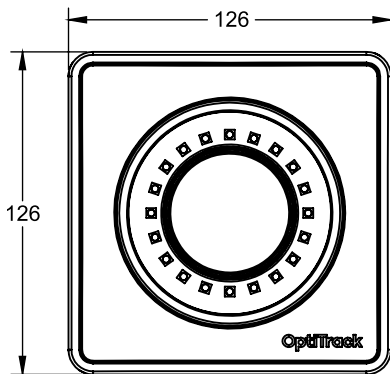
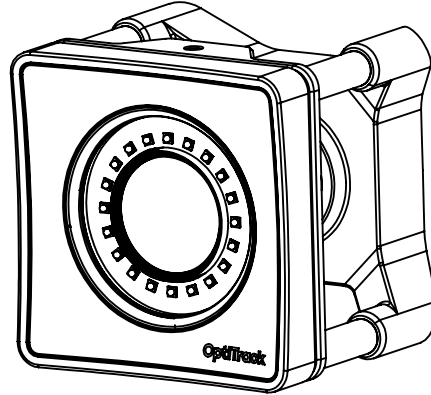
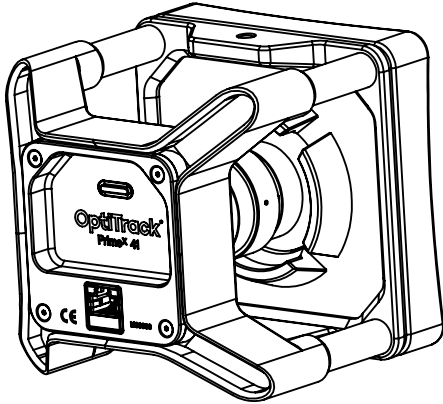


GigE & PoE+ Jack

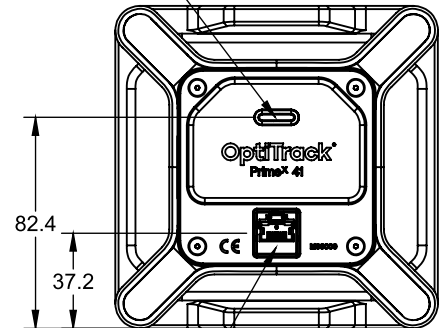


Prime^x 41

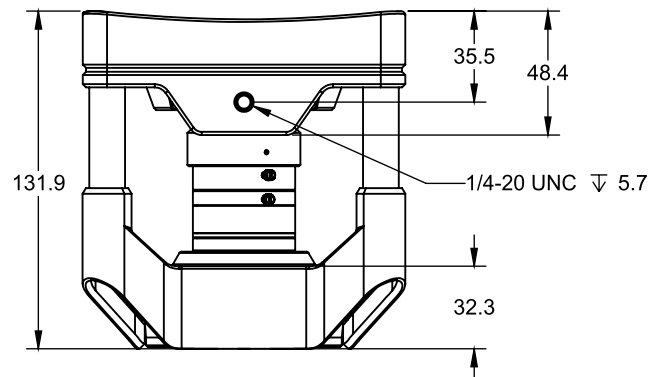
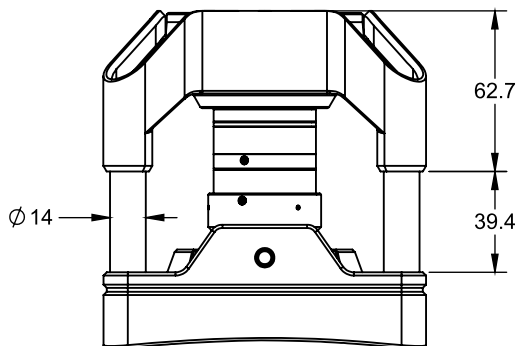
Technical Drawings



Aim Assist Button
& Status Indicator

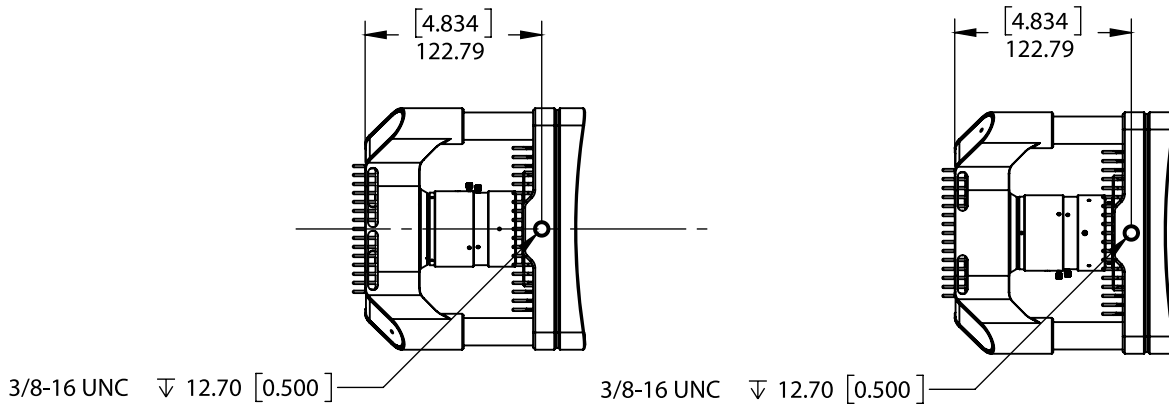
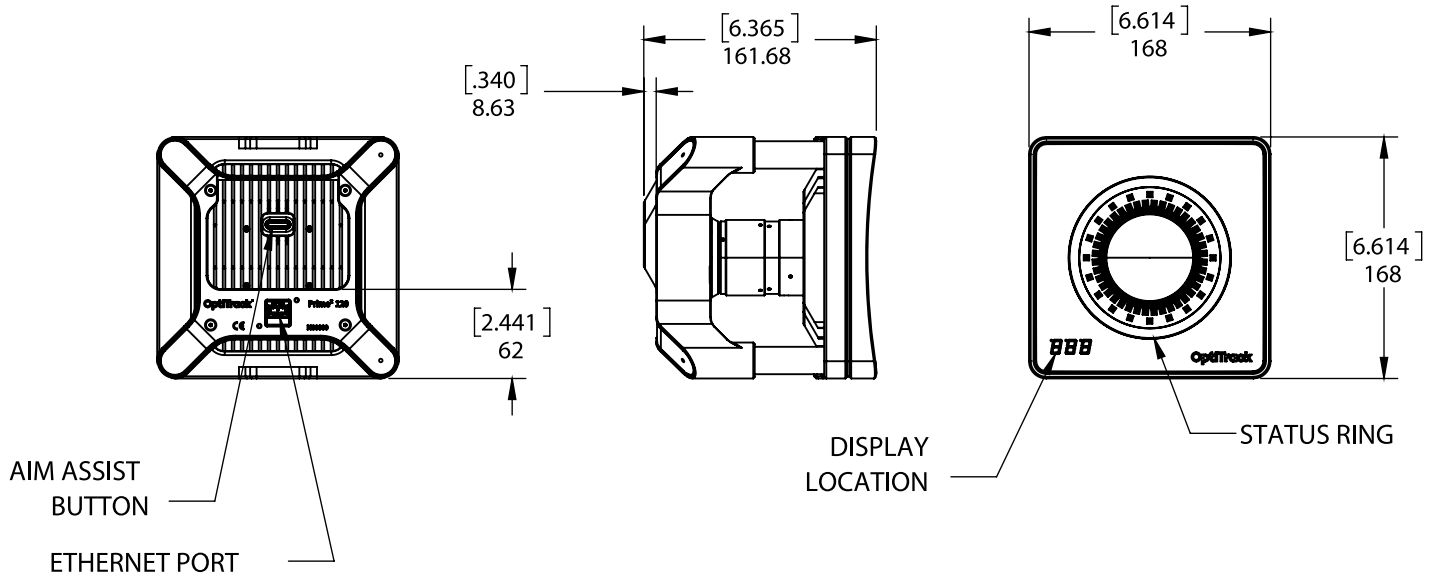
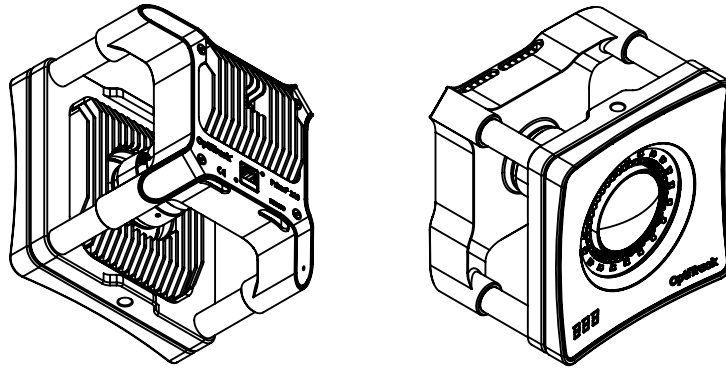


GigE & PoE+ Jack



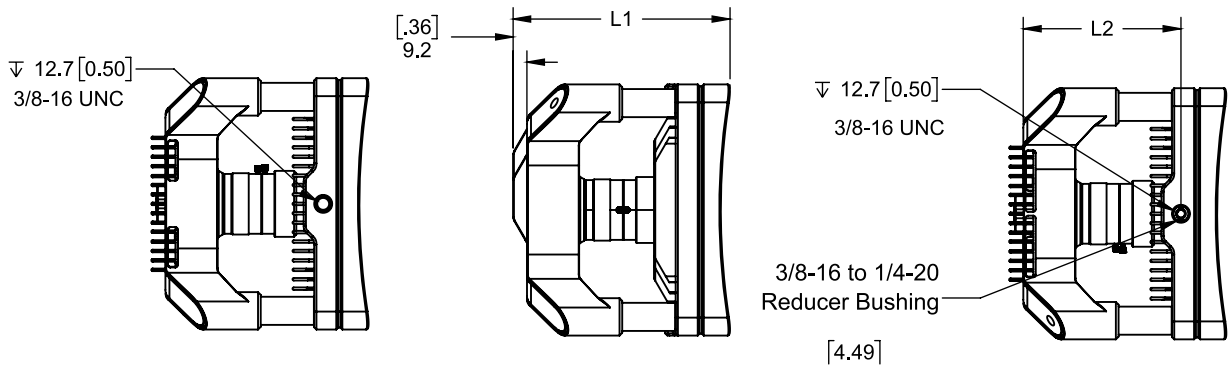
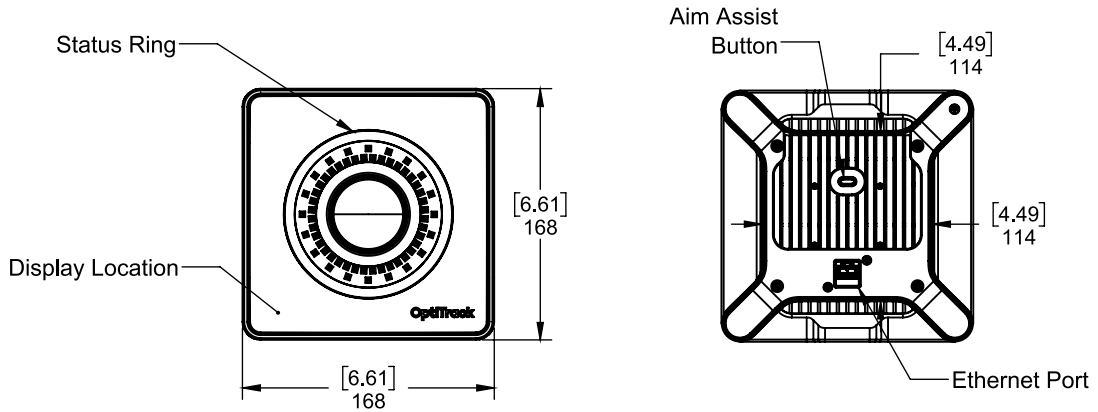
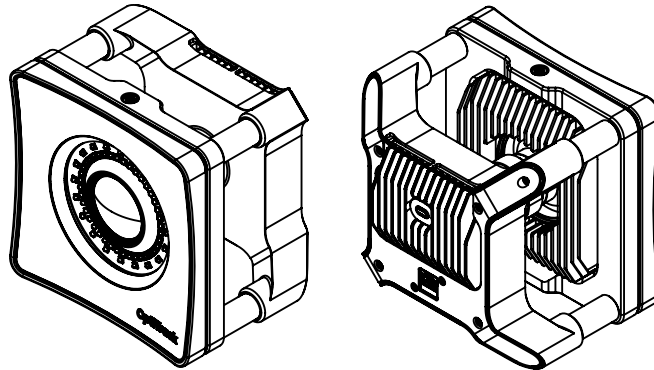
Prime^x 120

Technical Drawings



Prime^x 260

Technical Drawings



Lens Options					
Focal Length	Field of View	L1		L2	
		mm	in	mm	in
8.9mm	74° x 74°	140.2	5.52	100.7	3.97
11.8mm	57° x 57°	144.7	5.70	105.2	4.14

All specifications are subject to change without notification.

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