

Polaris Vega® Model Comparison

The strength of the Polaris product suite lies in the commonalities and differences of its optical trackers. All share the same foundation of sub-millimetre measurement accuracy and reliability. All are engineered and manufactured to deliver superior tracking performance. But it's their differences that provide boundless opportunities for customizing and integrating into OEM system workflows.



Polaris Vega[®] ST

Our standard optical tracker delivers exceptional measurement accuracy and reliability – hallmarks of our entire Polaris line. Volumetric accuracy to 0.12 mm RMS is achieved over a large measurement volume, with tracking data streamed via Ethernet. An optional Extended Pyramid Volume and Positioning Laser augment flexibility and control.



Polaris Vega[®] VT

This industry-first optical tracker combines HD video and IR tracking to capture a live or recorded view of tracked tools within the measurement volume. Video data and IR tracking data are aligned in real time to a common frame of reference. Different camera resolutions and settings maximize the capture of high-contrast images.



Polaris Vega[®] XT

Our most advanced optical tracker delivers volumetric accuracy to 0.12 mm RMS with minimal noise, an average latency below four milliseconds, and a frame rate as high as 250 Hz, for measurement data that is capable of real-time integration into robot-assisted surgery systems. Tight data synchronization and Ethernet connectivity add to best-in-class measurement performance.





	Polaris Vega [®] ST	Polaris Vega [®] VT	Polaris Vega [®] XT
ACCURACY	/		
Volumetric Accuracy RMS (Pyramid): 0.12 mm	x	x	x
Volumetric Accuracy RMS (Extended Pyramid): 0.15 mm	x	x	x
95% Confidence Interval (Pyramid): 0.20 mm	x	x	x
95% Confidence Interval (Extended Pyramid): 0.30 mm	x	x	x
PERFORMANCE			<u>.</u>
Maximum Frame Rate: 60 Hz	x	x	
Maximum Frame Rate: 250 Hz			x
Low Latency: < 4 ms (typical)			x
Standard Latency: < 16 ms (typical)	x	x	
Improved Measurement Precision			x
DATA COMMUNICATION			
Ethernet Connectivity	X	x	x
MECHANICAL			
Dimensions: 591 mm x 103 mm x 106 mm	x	x	x
Weight: 1.7 kg	x	x	x
Weight with Radiation Hardening: 2.15 kg	x		
OEM CUSTOM BRANDING			<u> </u>
Custom Bezel Available	x	x	x
ENHANCED FUNCTIONALITY			
HD Video Camera		x	
Optional Radiation Hardening	X		
Optional Extended Pyramid	X	x	x
Optional Positioning Laser	x	x	x



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